ED 118 136 IR 003 041

AUTHOR TITLE Roberts, S. A.; Bradshaw, R. G.

CLOSSS: A Machine Readable Data Base of Social

Science Serials, Progress Report, 1971-1972. Working

Paper No. 8.

INSTITUTION PUB DATE NOTE

Bath Univ. of Technology (England). Univ. Library.

Mar 73

118p.; Design of Information Systems in the Social Sciences; For a related document see ED 060 876; Some pages may not reproduce clearly due to size of

print

EDRS PRICE DESCRIPTORS

MF-\$0.83 HC-\$6.01 Plus Postage

Bibliographies; Cataloging; Computer Oriented Programs; *Data Bases; *Information Systems; Libraries; Library Automation; *Library Research;

Library Technical Processes: *Serials: *Social

Sciences

IDENTIFIERS

*Bibliometric Studies; Checklist of Social Science Serials; CLOSSS; Design Information Systems Social Sciences; Great Britain; Machine Readable Files

٨

ABSTRACT

Daisgn of Information Systems in the Social Sciences (DISISS) is a research project conducted to describe the main characteristics of the literature of the social sciences using bibliometric techniques. A comprehensive machine readable file of social science serials was developed which is called CLOSSS (Check List of Social Science Serials). Data collection, data format procedures, editing and coding serials data, file creation, and analysis of the data base are all necessary operations for construction of a machine-readable file of bibliographical data. Data collection sheets, classification and coding procedures and labels are appended along with a diagram of main components of a CLOSSS record. (CH)

Bath University Library

Design of Information Systems in the Social Sciences
Working Paper No. 8

CLOSSS: A MACHINE READABLE DATA BASE OF SOCIAL SCIENCE SERIALS

PROGRESS REPORT 1971-1972

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRO-OUCEO EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGIN. ATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRE-SENT OFFICIAL NATIONAL INSTITUTE OF EOUCATION POSITION OR POLICY

March 1973



PREFACE

This working paper reports the work carried out by the DISISS research team to produce a machine readable file of data on serial publications of relevance to the social sciences. By December 1972, the machine file had been created in magnetic tape form in readiness for carrying out a number of bibliometric studies of the serial literature; these studies will be reported towards the end of 1973.

This working paper was drafted by Mr. Roberts and Mr. Bradshaw with assistance from Mr. Brittain and Mr. Line. Miss Ritchie and Mr. Nicholas of the Polytechnic of North London gave considerable assistance in preparing material for the paper. Miss Skelton read through the draft and assisted in proofreading.

The members of the DISISS team are as follows:

Project Head:

M.B. Line

Senior Research Fellow:

J.M. Brittain

Research Fellow:

S.A. Roberts

Assistant Research Officer:

Miss B. Skelton

Programmer/Analyst:

R.G. Bradshaw

Mrs. C. Arms (part-time)

Consultant Systems Analyst:

W.Y. Arms, lecturer in

Mathematics, Open University

Members of staff of the Polytechnic of North London, School of \(^\)Librarianship, associated with DISISS are as follows:

Research Assistant:

D. Nicholas

Research Assistant:

Miss M. Ritchie

Lecturer at PNL:

Mrs. P. Layzell Ward

For convenience referred to as CLOSSS (Check List of Social Science Serials)

•		. CONTENTS	Pag		
ĭ.o	INTR	ODUCTION .	· 1		
•	1.1	Plans and Objectives	^ 1		
2.0	SERI	ALS DATA	5		
	2.1	Record format	5		
	2,2	Definition of serials population	6		
	2.3	CLOSSS data record	9		
		2.3.1 Data fields	10		
	2.4	Machine file	13		
_		2.4.1 Record format and file structure	14		
3.0	DATA COLECTION				
	3.1	Serials data recording sheets	16		
	3.2	Data collection exercises	. 17		
		3.2.1 Planning and Objectives	18		
	•	3:2.2 Recruitment and instruction of students	20		
		3.2.3 Data collection reports	21		
	3.3	Supplementary and additional data collection	22		
4.0	EDITING AND CODING SERIALS DATA				
	4.1	Bibliographical editing and checking	23		
	4.2	Coding	24		
5.0	FILE	CREATION	. 05		
5.0	5.1	Punching	· 25		
		5.1.1 Punched cards or paper tape	25		
		5.1.2 Punching instructions	25		
		5.1.3 Performance	26		
	5.2	File creation	27		
		5.2.1 Programs	27		
		5.2.2 Summary of record handling requirements	28		
	•	5.2.3 Data vetting	29		
		5.2.4 Proofreading	29		
6.0	ANALYSIS				
	6.1	The adequacy of the data base for the purposes of the project ,	29		
	6.2	Parameters of the literature	32		
	6.3	Presentation of serials and bibliometric data	38		

e



4

			Page
7.0	PROSPECTS		
٤	7.1	Future requirements for DISISS	38
	7.2	Conclusion and future prospects	38
Refere	nces		41
APPEND	ICES	•	•
	Α.	Data collection sheets	
	•	(i) Pilot version	
÷.		(ii) Final version	*
	В.	Subject headings: guidelines for subject coverage of serial titles on CLOSSS file	
	c.	Libraries visited during field data collection	
•	D	NLL serials holdings list: conventions used when checking	
	E	Procedure for adding NLLST serials to CLOSSS	
	F.	Some estimates of size and composition of the social science serial literature	•
	G	Some bibliographical sources consulted during editing of CLOSSS data	
	H	Coding scheme and instructions	
	I	Punching instructions	-
	J	Data vetting	
	K L	Specimen printout from CLOSSS file Proof reading and updating CLOSSS	
FIGURE	S IN T	EXT	
Figure	1.	Diagram of main components of a CLOSSS record	15
TABLES	IN TE	хт	
Table 1.		Description of data fields	12
Table 2.		List of descriptive analyses based on the serials data file	34-3



1.0 INTRODUCTION

DISISS (Design of Information Systems in the Social Sciences) is a research project based at the University of Bath. The objective of the project is to carry out research necessary for the design of information systems in the social sciences, whether by the creation of new systems or the modification of existing ones. The project, which is financed by OSTI, commenced in January 1971.

The work of DISISS is described in a series of working papers, available from the Library, University of Bath. This present working paper follows on from Working Paper no. 2^1 , which described the preliminary work on a machine readable data base of social science serials 2^1 .

bibliometric studies, which will describe the main characteristics of the literature of the social sciences. Bibliometrics involves a quantitative approach and the application of statistical methods for analysis, and therefore it is essential to work with high quality data. Most of this paper is concerned with the mechanics of gathering high quality data about serials. Some of the bibliometric analysis to be undertaken will be mentioned in the next few pages and again in section 6.0 where some detailed proposals for statistical analysis of the primary literature are discussed. The resulting work will be proposed towards the end of the project.

1.1 Plans and objectives

The original proposal³ for bibliometric research in the social sciences envisaged the creation of a comprehensive file of social science serials for the purposes given below.

Design of Information Systems in the Social Sciences. Proposals for research, 1971-1973, Bath, Bath University Library, March 1971.



Roberts, S.A. A machine readable data base of social science serials.
Bath, Bath University Library, November 1971. (DISISS Working Paper no. 2).

 $^{^{2}}$ For convenience referred to as CLOSSS: Check List of Social Science Serials.

(a) To enable bibliometric studies to be carried out on the primary literature of the social sciences (e.g. calculation of size, growth, language, country of origin, form).

ç

- (b) For use in citation studies, which includes
 - (i) drawing a random sample of source journals
 - (ii) identification of cited journals
 - (iii) use as a frame of reference for the assessment of scatter of cited journals for different sets of source journals.
- (c) For use in studies of the relationship between primary and secondary literatures.
- (d) For use in a comparative study of journal and monograph literatures.

No suitable data base has been found which meets the requirements for the bibliometric studies, in terms of range of subjects covered and amount of information about journal titles, although existing lists of serials have been used in compiling, checking, and supplementing CLOSSS.

Every serial title included in CLOSSS has been examined in hard-copy form¹: initially this was not difficult since the collection began with visits to a number of social science libraries (Appendix C). Further collection of serial titles is likely to involve preliminary identification of titles in bibliographies, as well as direct inspection of library collections; in the former case, material will continue to be located and physically examined before including it in the file, because it is only by field inspection that the criteria relating to



For working purposes some titles (e.g. cited titles) have been included in the file without first being inspected; however, these titles will ultimately be located and examined wherever possible.

identification of serials (section 2.2) can be effectively interpreted.

In general the objectives stated at the beginning of this section continue to guide current work on CLOSSS, although there have been detailed changes in policy and emphasis. A general discussion of the objectives of CLOSSS was presented in Working Paper no. 2. This paper dealt with the problems of choosing a format for recording and input, the merits of MARC¹ and MASS², and outlined uses of a serials data base. The series of operations necessary for creating the serials data file was not dealt with in detail in Working Paper no. 2. These operations are considered in this paper which contains a detailed report on the intermediate stages of construction of CLOSSS, and a commentary on progress towards meeting the major objectives noted above. The decisions which led to the creation of CLOSSS are mentioned only where relevant to current activity. A fuller discussion of these decisions is given in Working Paper no. 2.

Section 2.0 of the present paper considers the data format and record fields, and concludes (in sections 2.3 and 2.4) with a description of the major features of the machine readable data base.

Section 3.0 discusses data collection. The data which was put into the file during mid-1972 had been collected by November 1971 when Working Paper no. 2 was completed. This paper mentioned the possibility of further collections of data on serial titles: this has not yet been done. It is now apparent that the present data will provide an adequate sample for the bibliometric work planned; further expenditure of resources on data collection would be unlikely to bring a proportionate benefit for the immediate purposes of DISISS. Although the present serials data file does not represent a fully comprehensive



¹ MARC: Machine Readable Catalogue

²MA6S: Marc-based Automated Serials System

collection of titles, the possibility of creating such a file still exists, and is examined in section 7.0.

A prominent, and indeed essential, feature of the work on CLOSSS has been the working relationship established between the central team at Bath and researchers at the School of Librarianship, Polytechnic of North London (PNL). This relationship was established at the outset of DISISS and has covered other fields besides CLOSSS. Because DISISS was able to involve a fairly large number of library school students, it has been possible to collect data in the field in a relatively short period of time. To carry out the field data collection it was necessary to develop procedures for instruction, data collection and supervision. The problems which have arisen are similar to those which would be encountered in similar serials data projects, so that the particular solutions adopted and described here may be of more than local interest. The collecting, editing and coding of over 5,000 serial records have occupied a considerable proportion of resources available to the project from PNL: this stage is reported in section 4.0.

The creation of the machine readable file was delayed until the appointment of a programmer to the project in February 1972. Substantial progress has been made since. Very little information about the mechanics of creating the machine file was given in Working Paper no. 2; this is now reported in detail in section 5.0.

In section 6.1 a brief descriptive summary of the data is given and the problems likely to occur during bibliometric analysis of the data are discussed. Section 6.2 reviews the analyses that are possible with the serials data file. Section 7.0 provides a review of prospects and possible developments in social science serials data.



2.0 SERIALS DATA'

2.1 Record format

The construction of a machine readable file of bibliographical data necessitates the use of a well defined record format for collection, coding, computer storage and manipulation of data. A record format consists of a string of data fields representing the bibliographical data being input to the file. The CLOSSS record format consists of 22 data fields (see Section 2.3.1). The record format chosen for the CLOSSS file has been developed according to the needs of the DISISS project, although it is potentially compatible in field structure and bibliographical content with the MASS format developed at Loughborough and The MASS tags are not used at present, but could be inserted Birmingham. in CLOSSS records. Working Paper no., 2 discussed the various options open to DISISS in choosing a record format, and the implications of the choice for future use of the serials data file. Very little has been lost so far because the record has not used MASS or MARC-type formats; in fact, the need to consider them in the first place was due to the possibility of having to use a serials system package for creating the serials file. The appointment of a computer programmer changed the situation and enabled DISISS to go ahead independently with the creation of the file.

The record format varies slightly according to different contexts of use; the three main contexts are, recording and collecting the data (a data collection sheet format), input (punched card format), and machine file (machine format/magnetic tape format). The variations, however, are of a very minor nature and do not prohibit

Systems considered included those currently being established at Loughborough University and Southampton University.



reference in this discussion to a general record format. More detailed consideration of record format is contained in sections 2.4 and 5.0.

2.2 Definition of serials population

There are at least four aspects to defining the social science serials population:

- (i) a definition of serials as a bibliographical form
- (ii) establishment of subject boundaries
- (iii) mortality in serial titles; to what extent should dead titles be included and the identification of a cut-off point (these matters receive further attention in section 3.2.1)
- the intellectual level of the publications; it could be argued that certain popular magazines or womens, magazines are relevant to the social sciences and should be included. This question revives the debate about coverage; for instance, whether the file should be restricted to publications used to communicate the work of social scientists or whether the criteria should cover all materials relevant to social scientists.

 A satisfactory solution to this problem has not been found.

The collection of data on serial titles through direct field-work and searching in bibliographical publications introduced a considerable problem of discriminating between serial and non-serial publications, both for students collecting data and for members of the research project. It was decided at an early stage not to attempt a precise definition of serials, although, in retrospect, the AACR 1967 definition comes fairly close to intention and subsequent practice. On practical grounds; a rigid adherence to definition would have made certain parts of the project unworkable - for example, student instruction and data collection - so

Serial. A publication issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely. Serials include periodicals (e.g. newspapers, journals, and the memoirs, proceedings, transactions, etc. of societies), annuals (reports, yearbooks, etc.), and numbered monographic series. Anglo-American Cataloguing Rules (British text) London, Library Association, 1967, p.268.

it was decided to adopt, in the first instance, a broad concept of the type of item that could be recorded in a serials data base. Working definitions were supplied by PNL for student instruction and general guidance.

Serials were broadly defined as publications of indefinite duration appearing in sequence (regularly or not), under a common title, their order being ascertainable from numbers or dates appearing in each issue.

Within such a definition there was scope for comprehensive collection of monograph series, annual reports, periodicals and journals, newsletters, etc. The main deliberate exception was newspapers, which were not collected.

The basic criterion adopted for assembling the data file was "if in doubt, collect", evaluation of material gathered would take place during the editing. Some control was introduced at the start by directing students to work from serials catalogues and shelf lists in the libraries chosen for collection (Appendix C), so to some extent reliance was being placed on the collective decisions of a variety of librarians and libraries as to what constituted serials. A similar check operated during the data collection at the National Lending Library for Science and Technology (NLLST) where the only stacks searched were those containing serials.

Throughout the editing very few items were rejected on the grounds that they were definitely not serials, and allowing for the local libraries circumstances all listed serial holdings were recorded. By not attempting to define the population ourselves it could be argued that there has been an implicit consensus based on library policy and action, which has served as a crude filter. Similarly, when bibliographies have been searched to provide material, various decisions on forms to be included or excluded have been implicit.

Since the basic object of CLOSSS was to provide a comprehensive list of social science serials, inclusion and exclusion had to be done on the basis of subject as well as bibliographic form. Subject definitions and boundaries are one of the areas being explored on the project through citation studies; early on, therefore, rigid definitions were not made concerning social science subjects. Both students and research staff needed some guidance; this was provided by some pilot, work undertaken



by Bath University for OECD¹ and in other cases by the expedient of adopting a criterion that if more than 40% of articles in a title were judged social science then the title could be regarded as social science for the purposes of CLOSSS. The criteria used in judgement were intuition and personal knowledge; these criteria were used during the data collection at NLLST and during data collection in libraries often in connection with their own classification of serial titles.

Opinions have varied within the project on what subjects should be included in the social sciences; examples of marginal areas are library and information science, some aspects of management, computing and data processing, etc. The "if in doubt, collect" approach has operated with regard to subjects, although the 40 per cent criterion endangers the claim of the present collection of approximately 5,000 social science titles to be comprehensive, since it greatly widens the scope for including material.

Subject coverage established by 'a priori' definition will be related to the subject clustering of journal titles, generated from citation studies, but full data for comparison and analysis is not available at present. This comparison will provide a very good empirical check on the content of the serials data file.

Since it was not possible to search the British Museum Library within the resources available, CLOSSS is likely to be deficient in older, now dead, serials especially those that predated the establishment of the British Library for Political and Economic Science. Numerically, and for citation analyses, this deficiency may not be important, but it is liable to distort estimates of growth.

Serials below a certain arbitrary level were excluded, e.g., women's magazines, etc. These may be numerically very significant, but would not affect citation analyses and an attempt to include them would have bulked out the file to very little purpose.

Pilot work on developing some working definitions of the social sciences was carried out in connection with the preparation of an Inventory of information services, information sources and information research in the social sciences. Bath University received a contract from OECD to undertake the work during 1970-71. The list of subject headings is reproduced in Appendix B.



2.3 CLOSSS data record

The data elements comprising the fields in the bibliographical record had:

- (i) to be adequate for description and unique identification of each serial title;
- (ii) to be of value for bibliometric analysis;
- (iii) to take into account the limited resources available for collection, editing and punching;
 - to be readily identifiable during data collection.

 Since reliance was placed on student field data collection, data for the file needed to be readily identifiable and capable of relatively rapid retrieval, to make best use of the limited amount of money which could be spent on collection. When it was necessary to rely on bibliographical tools for data, similar criteria applied.

Almost any data field can be used in a bibliometric analysis; the data could be descriptive - for example, issuing body, publisher, country of publication, titles; or quantitative - for example, price number of articles, issue frequency, date of first publication, date of ceasing publication.

The problem was rather which of the numerous data fields of potential value could be included consistent with the criteria mentioned above. During the planning stages the problem of selecting the data fields revolved around a consideration of the factors listed below. Few of the factors were fully accounted for when the data collection began, and in most cases the realisation of the problems was reinforced during the field work.

Some of the issues considered included:

- (i) difficulty in tracing and extracting information
- (ii) likely amount of effort in searches for missing data
- (iii) time taken to collect information in varying field locations, e.g. social science libraries in London, the NLLST at Boston Spa



- (iv) difficulties (physical and intellectual) in handling certain types of serial publication
- (v) estimates of the amount of editing and checking likely
- (vi) accuracy of information
- (vii) sources of error likely in recording data
- (viii) methods of administering the data collection
 - (ix) student data collectors' familiarity with the literature and bibliographic techniques
 - (x) relative merits of attempting comprehensive collection of titles and relying on sampling when 'complete' data base is assembled
 - (xi) language difficulties.

In addition, it was necessary to take account of the overall spread and deployment of resources on the exercise. This problem was often severe, because of

- (i) difficulties in estimating the size of the serial literature and in translating this into realistic work loads and schedules;
- (ii) progressive and sometimes irreversible shifts in policy about the Objectives and requirements of CLOSSS

The objectives changed in detail rather than in general outline over the first 14 months, being influenced by such factors as requirements for sampling source journals for citation studies, problems involved in staging data collection at NLLST, and difficulties and delays in defining specifications and creating the machine readable file.

A series of meetings between Bath and PNL was held during January-March 1971, to reach agreement on coverage of data fields. The next section briefly summarizes the data fields chosen.

2.3.1 Data fields

The serials data record consists of 22 data fields. Data fields (01)-(11) contain bibliographical information on the serial and its

15



Numbering of data fields refers to the final version data collection sheet and not the pilot version. The conversion is given later in this section; the final version is often referred to as 'new' data and the pilot version as 'old' data.

bibliographical history. Data fields (12)-(20) contain additional descriptive information, relating to the origin, content and function of the serial. Field (00) identification code/CLOSSS number was added during editing. Fields (21) and (22) are available for individual records if required.

The choice of data fields was primarily governed by their value for bibliometric studies - in fact, none of the data elements is without value for this purpose; for example, titles can generate word frequency data which is amenable to statistical treatment.

A full list of the data fields is given in Table 1, with equivalent field code numbers for pilot and final version data collection sheets.



Description of data fields

			
Field num Pilot Fi	ber* nal	Name of field	Notes
(00) (00)	Identification code/CLOSSS number	,
(01) (,O1)	Title (in full, as it appears currently)	
(04) (02)	Title in English if different from (O1)	,
(02)	(03)	Alternative title(s)	
(03)	(04)	Previous title(s)	
ø (07) ((05)	Beginning date	
(03) . ((06)	Ending date, if any	
(10)	(07)	Frequency/issues per annum	(08) and (09)
(05)	(08)	Issuing body	Distinction, if any
ς= ((09)	Type of issuing body	between publishers and issuing bodies
(05)	(10)	Publisher (Name)	made only on final version data collection sheets
(09)	(11)	Country of publication	
(11)	(12)	Type of serial	•
(12)_ ((13)	Description of serial	ų
(13)	(14)	Nature of contents	
(17)	(15)	Abstracts with articles	•
(14)	(16)	Language(s) of contents	
(19)	(17)	Assessment of subject content .	
.(18)	(18)	Number of articles in 1969	
(15)	(19)	Subscription price (1969)	<i>U</i>
(16)	(20)	Coverage by indexing and abstracting services	(21) To be added if necessary Requires additional
~ ((.21)	ISSN	data collection
(22)	(22)	Subsequent title (CLOSSS number)	·

^{*&#}x27;pilot' refers to the pilot version data collection sheet used during the early stage of the data collection and subsequently modified in the light experience to give the final version.

2.4 - Machine file

Both present and future needs of a social science data base were considered in deciding the type of file to be created. A magnetic tape file of the data, held in a very simple and easily retrievable format, was desirable for these purposes:

- (i) the handling and manipulation of data for the needs of the DISISS project;
- (ii) conversion of the data to another format for any future purpose (e.g. MASS or MARC format);
- (iii) conversion for use on another computer system; this can be readily achieved with a magnetic tape file.

Serial processing of a magnetic tape file would allow great flexibility in updating (e.g. adding/modifying complete records or individual fields within records) and handling the data (e.g. creating a file of titles arranged alphabetically). The use of a magnetic disc file as a data base would have been just as effective. However, it was felt that the enhanced facilities of using a disc file, e.g. random processing of an index sequential file would not be required initially, although such a file could be created from the magnetic tape file at a later stage if required.

Many data elements were coded, and codes were introduced in other items to represent special conditions, e.g. coding of X in field 06 (ending date), and codes X, G, H, Z in field 07 (issues per annum); further details are given in Appendix H.

Because of the variable nature of the data, each data field is included in the record, in the form: field code | field data | end of field marker. Each record commences with the record number (CLOSSS number, field OO) and terminates with an end of record marker in place of the end of field marker after the last data field in the record. Where the data in a field consists of more than one element, e.g. a number of alternative titles or languages, each element in the data field is separated by a special field separator.



There were various reasons for arranging the file in this way rather than in any other format.

- (i) Fixed length data fields for each record would have been extremely wasteful of space. However, individual fields would be much easier to manipulate with fixed length data fields since, all field codes, field separators, end of field and end of record markers would have been eliminated.
- (ii) A mixture of both fixed and variable length data fields within each record would have caused problems. Although this would initially seem to be the best compromise, it was felt that the need to keep the format of each record in ascending field code sequence was more important. If a number of fields had to be treated as variable, then it was as well to treat all as variable, and maintain this sequence.

Another advantage of using variable length data is that individual fields can contain either coded or uncoded data without any distinction, e.g. field 06 can contain either a 4-digit ending date or a single coded character, field 07 can contain up to a 3-digit number or a single coded letter. Also, if coded fields are incorrectly coded, e.g. country FR coded FRE, the data can still be created using a variable format, whereas in a fixed format this would not have been possible, except of course when, say UK was incorrectly coded GB.

With variable length data it is unnecessary to allow any space in the record for fields which are not present. The file updating routine will be used to delete, insert and amend fields within each record, as well as to delete, insert and replace complete CLOSSS records.

2.4.1 Record format and file structure

The magnetic tape data base contains one variable length record for each serial in the file. Records are arranged in blocked rather than unblocked format on the tape.

The records in the file are held in ascending sequence of their 5 digit record number (CLOSSS number), and each record will be accessed

In this context serial refers to the complete bibliographical data

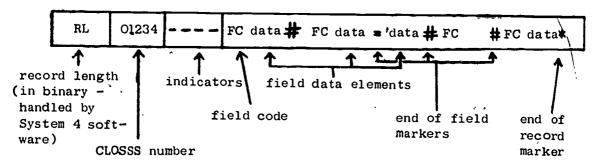


by this number. (Although the file will consist of approx. 5,000 entries at present, a 5-digit record number was provided so that at some future stage additional titles could be added to the file, using a different numbering range; these records could best be isolated by using a prefix digit).

Individual fields in each record are arranged in ascending sequence of their field codes. Each field consists of a 2-digit field code in the range Ol to 22, followed by the field data, followed by an end of field marker (#). Each separate data element in the data field is separated by a field separator(=). At the end of the record, the end of field marker is replaced by an end of record marker (*).

Between the record number and the data fields a space of four characters has been left. Various indicators will be inserted in these spaces to indicate specific properties of the record. For example, it is envisaged initially that indicators will specify whether the record was created from 'old' or 'new' format data (useful for isolating various coding differences between the two data collection sheets); whether the serial is currently published or not (data from field 06, which will be useful in the descriptive work on the file); whether the record contains a field code 22 or not (useful when preparing an alphabetic listing of titles); and whether or not the record had met with a query whilst it was being vetted at the creation stage (this information is useful in cleaning up the file). Later, this area may be used for holding other data.

Figure 1. Diagram of main components of a CLOSSS record





The only restrictions are that no particular data element may exceed 250 characters in length, and that the total record length must not exceed 900 characters in length (equivalent to 12 punched cards).

In fact, the average record length is 180-200 characters, although some records of over 500 characters in length have occurred.

3.0 DATA COLLECTION

3.1 Serials data recording sheets

The design, development and use of data recording sheets have featured prominently in the production of CLOSSS. The first consideration was the design of a sheet suitable for use in the field with groups of library school students; simplicity and clarity were essential. It was decided not to make the sheet self-coding, but to keep it simply for recording the information from each serial as examined in the field; it was felt that trying to make it any more than this would tend to complicate the operation and reduce flexibility at a time when the computer aspects of the project had not been finally decided upon.

The data sheets have fulfilled five functions:

- (i) Field data collection sheet
- (ii) Editing form
- (iii) Coding form
- (iv) Punching document
- (v) A hand copy archive of serials data.

The data sheets have proved very useful pieces of stationery; to the students they were a tangible record of work done for the project: and to the planner of the exercise a means of measuring progress, the size of the file, and a basis for administration. It has been useful to have all the details about a serial title on one piece of paper which could be amended or referred to at any stage of the project; this has also assisted in taking action on queries since handwritten entries could be traced to the original data collector.



Two versions of the data sheet were eventually developed and used.

- (i) Pilot version. The pilot version data sheet was used in the first field data collection in April 1971. It contained one less data field than the final version (see below); some data field names differed from those used later, less detail was specified concerning publisher and sponsor, and the order of data elements varied from the final version. Some codes and codings for data fields(06), (12) and (13) differed from the final version.
- (ii) Final version. The final version data sheet embodied various modifications arising from differences mentioned in (i) which resulted from discussions held after the April 1971 data collection. Many modifications resulted from criticisms put forward by the students, and this helped to make data collection as quick, easy and accurate as possible. Changes in coded categories contributed to a more accurate description of serials.

Data sheets are reproduced in Appendix A.

3.2 Data collection exercises

The main data collection was undertaken during three periods:

- (i) April 1971. Visits were made to various London social science libraries (Appendix C)
- (ii) July 1971. Collection was concentrated at British Library of Political and Economic Science (BLPES)
- (iii) September 1971 National Lending Library for Science and Technology (NLLST) at Boston Spa

Between January and April 1971 an up-to-date printout of the NLLST list of current serials was scrutinized and marked up for possibly relevant social science titles. It had been planned to feed in these



Y

titles to the CLOSSS file, in the first place without field inspection, using criteria listed in Appendix D. Since this systematic addition of titles from the NLLST list has not been carried out the problem of physically examining as many as 10,000 potentially relevant titles at - Boston Spa has not been faced except partially by examination of certain sections of NLLST stock in September 1971 and a collection of about 1,010 records. In November 1971 a plan to feed in the NLLST titles remaining was discussed and a procedure developed (Appendix E). However, a policy meeting held in that month decided to postpone the work and no action has yet been taken. It remains to be seen what the coverage of titles on the marked-up NLLST list is on the CLOSSS file of some 5,000 records, plus titles generated from citation studies, but such a measure would give (i) an idea of the proportion of the NLLST titles that are social science by comparison with the DISISS file, (ii) evidence 🛼 of how accurate the intuitive marking-up of titles on a large 'titles only' list had been.

The work done on the NLLST list served to familiarize the researchers with serial titles and to stimulate thinking on a range of problems; for example, form of title, previous titles, foreign language titles, etc. The work on the serials data base has benefitted considerably from the contacts established in the NLLST.

3.2.1 Planning and objectives

The objectives of the data collections were to gather as much information as possible about social science serial titles, within the specifications of data elements and project requirements, in the most economical manner possible. A limited amount of money was available and within the sum the object was to obtain as much student labour time as possible.

Thanks to the help of Dr. K.P. Barr, the NLLST provided (i) an up-to-date print-out of serial titles; (ii) assistance in staging data collection at Boston Spa and, (iii) an offer of assistance in updating and expanding the CLOSSS file.



The first version of the machine file will contain some 5,000 records; this represents about 90% of all records gathered during the field data collections. The number of titles which will be added as a result of citation studies is not yet known.

The connection between the DISISS project and PNL was a fortunate one and has been well suited to the nature of the work in hand. It was thought that students could be used on the work in two ways: (i) as a part of classwork or projects, or (ii) as paid vacation work. The latter alternative proved more workable, and the procedures it entailed are reported in more detail in 3.2.2.

Estimating the volume of work involved was crucial; basically, this involved evaluating estimates of the number of social science titles recorded in existence. The work by Gottschalk (1963) and the data in the UNESCO Statistical Yearbook gave very little indication; existing bibliographical sources like the World List of Social Science Periodicals and Ulrich could provide some data (Appendix F), and the mark-up of the NLLST list produced an estimate of 8,000 \(\frac{1}{2}\) 10,000 corroborated by Dr. Barr of the NLLST.

No one figure was settled upon; various working estimates weremade within a range of 5,000 - 10,000 titles. The exact figure in the
end made little difference, since the number of man hours available was,
determined by the hourly rate paid of £0.50. Collection periods were
determined on this basis and students were contacted and recruited for
definite periods.

It was particularly difficult to determine the rate of collection; it was not satisfactorily determined until after April 1971, which in the event proved to be a major field trial. The rate varied considerably with the environment in which collection took place and the type of material, but worked out eventually at an average of about 8 records per hour (excluding editing and bibliographical checking).

It is very difficult to estimate what proportion of potentially relevant social science material has already been collected; however we have a good idea of the unit costs likely to be involved in completing the data base, should the occasion arise.

In addition to the organisation of the labour force and of its deployment, it was necessary to contact libraries. This was done by PNL: details of libraries are given in Appendix C. The strategy adopted was



two-fold: (i) to cover first a variety of social science libraries which would be located mainly in London; (ii) to supplement the data at larger libraries in London and finally at NLLST, where also the best resources for supplying missing data and checking existed.

Alternative data collection strategies were considered. Whilst visiting social science libraries first might give a good detailed and specialised collection, visiting NLLST first would surely give broad coverage of the relevant social science titles (the mark-up of the NLLST list led us to believe this). However, the logistics of working with students were an important consideration in the final strategy. Basing the first collection on London meant working on familiar ground; secondly, the use of a large number of students at NLLST would have meant problems with travel, supervision and lodging, and would have cost more.

One other method, had there been-fewer students available, would have been for a small party to visit NLLST and collect data over a fairly long period. Working conditions at NLLST were reported to be far superior for this type of data collection. In the conditions, the approach chosen seems to have worked out quite well and over-all duplication of effort has not been very great. As already mentioned, the most serious gap in coverage has been the British Museum Library. The identification of serials in the General Catalogue and their retrieval from the stacks, would have been extremely time consuming - each record would have taken at least twice as long. This has led to a deficiency in older titles (not entirely eliminated by the collection from BLPES), and probably to some more recent British titles, in which the BML's collection is near complete, although one would expect most of these to be covered by other libraries.

3.2.2 Recruitment and instruction of students

Twenty-six students were recruited for the April 1971 data collection and ten for the July 1971 collection. Recruitment presented few problems; on the other hand briefing and instructing the students on the work to be done was a more complex matter. Most of the instruction was done before. April. Several seminars were arranged and an instruction manual developed as a result; the manual was then taken out during field data collection



for 'ready-reference' in matters of definition, variant names, abbreviations, etc. Several sessions of practical work were conducted before the main data collection. After the data collection exercises further discussion was held with the students and resulted in modifications to data sheets, data fields and procedures.

3.2.3° Data collection reports

(i) April 1971

-Material was collected between 5th and 9th April from
13 libraries in London with holdings of social science material.
This exercise was both a 'pilot' study and a major data collection;
two objectives achieved without conflict. In all, 3,050 records
were collected with about 10% duplication of titles. Twenty-sixstudents were involved in this exercise.

About 4% of records proved to be well outside subject scope; 55% of records were incomplete (mainly due to lack of beginning date and/or subscription price). The amount spent was £408.00 giving a unit cost of £0.12 a sheet; on average a record took about 14 minutes to locate and record information on the data sheet.

(ii) July 1971

Three students working at the London hool of Economics (BLPES) between 5th and 23rd July collected 1,600 records. A large proportion of dead material, annual reports and proceedings was identified.

There was about 5% duplication with material collected during April. About 3% of records collected were outside subject scope. The amount spent was £151.00 giving a unit cost of about $£0.9\frac{1}{2}$ a sheet.

(iii) September 1971

The field work was undertaken at the NLLST by two researchers from PNL, with the object of collecting material not available



26

Duplication rates for the data collection exercise have been based on an analysis of 1,000 completed CLOSSS sheets. Duplication rates have been low (possibly due to conscious exclusion at the time of collection). Low duplication in (ii) and (iii) would suggest that collection from the BML would add a large number of titles.

or easily accessible in the London libraries. It was soon realised that the relevant material at NLLST was a larger quantity than previously estimated. The collection obtained 1,010 records with about 5% duplication on earlier collections. The amount spent was £26.60 giving a unit cost of about £0.6½.

3.3 Supplementary data collection

Supplementary data collection, mainly involving the addition of new titles to the file is desirable, to fill gaps in the data already collected, to extend the coverage of the file, and to cope with relevant newly published titles which have appeared during the course of the project. Supplementary information of a number of kinds could be fed into the data file:

- (i) Data to complete existing records on the file:(a) missing data; (b) former titles.The British Museum Library would be an important source.
- (ii) Additional material from the NLLST collection in particular:(a) new titles, (b) missing data.
- (iii) Titles generated from citation studies and clustering experiments.
- (iv) Secondary service titles². The CLOSSS file already contains some secondary services, but coverage is far from comprehensive.
- (v) Newly published titles. Information on new titles is available from numerous sources, including the NLLST,

 International Social Science Journal and announcements in the primary and secondary literature.

The five possibilities for supplementary data collected enumerated above do not exhaust the number of potentially relevant sources which could be tackled were it decided to make the CLOSSS file as comprehensive as possible.

A file of titles of secondary publications has been collected as a part of the project.



13

See previous footnote.

4.0 EDITING AND CODING SERIALS DATA

Gir oly

4.1 Bibliographical editing and checking

The editing and checking of records collected involved the examination of data collection sheets, the identification of missing data, and an attempt to deal with inconsistencies and suspected queries in the data, such as forms of title and names of organisations. The bibliographical editing was undertaken entirely at PNL; by research assistants and some of the students who had participated in the field data collection.

The library at PNL possessed a wide range of bibliographical reference material and this was used for editing. Bibliographical sources were cross checked with data collected in the field. The main fields of information sought at the editing stage were price, title changes and date of publication; this information was not usually readily identifiable from field inspection of material. A combination of field and library data collection was both necessary and valid in the preparation of a serials data base. Some of the bibliographical sources used are listed in Appendix G.

The editing stage did not go as far as supplementing the file with additional new titles (except for previous titles). Some features of the editing worth mention are:

- (i) inadequate coverage of serial bibliographies, below the level of the major lists
- (ii) general lack of up-to-date serial bibliographies in specialised subject areas
- (iii) inadequacy of bibliographical information given in sources
 - (iv) discovery of errors in published bibliographies
 - (v) great difficulty in checking foreign language serialtitles and in obtaining bibliographical data for them
- (vi) very high time demand for editing material.



A sample check on a batch of data collection sheets was performed by an independent researcher, establishing errors on 14 out of 200 records - errors occurred usually in only one field. The sample items were checked against the actual serials at the libraries where they were located.

4.2 Coding

Editing and coding could often be done together, but on the whole the coding formed a distinct phase in the programme of work. The PNL undertook the entire job of coding the data.

Coding certain data fields was necessary to assist the handling of the data in machine readable form. Codings used are alphabetic, numeric or symbolic. Country of origin and language categories were given standard BNB/MARC codes.

The opportunity was not taken early on to make the data collection sheets self-coung. At the time of the first data collection no definite decisions had been made concerning the requirements for a machine readable data base, and when decisions were taken it proved unnecessary to rewrite the data manually on standard coding sheets which would be more familiar to punch operators. Codings were marked down on the original data collection sheets and punch operators soon became able to handle the material without too much difficulty.

The coding scheme is reproduced in Appendix H.



¹ Gorman and Linford (1971)

5.0 FILE CREATION

Working from the principles outlined so far, it has been possible to proceed to the creation of a machine readable serials data base.

The physical production of the file involves a great many stages at which detailed work is necessary. Editing, coding, punching, file creation and vetting procedures were established after considering alternative methods. This section describes the choices made for the file creation and the stages of work performed.

5.1 Punching

The main issues to consider at this stage are the choice of media, the organisation of work in cooperation with the Computer Unit of Bath University and the level of performance achieved.

5.1.1 Punched cards or paper tape

For punching variable length data, it was initially considered that paper tape should have to be used as an input medium. However, there were two strong reasons in favour of using 80 column punched cards instead.

- (i) Punch operators in the Computer Unit were more familiar with cards than paper tape, and the tape punching facilities were somewhat limited.
- (ii) A file of punched cards, although bulkier, is much easier to amend manually. Records incorrectly punched can then be repunched and inserted in the card pack to keep a hard copy of the data until sufficient accurate magnetic tape files exist.

5.1.2 Punching instructions

For the punch operators, the unfamiliar nature of the CLOSSS data



and its presentation on record sheets rather than on computer orientated coding sheets meant that explicit punching instructions were necessary. The instructions are reproduced in Appendix I.

The punch operators received CLOSSS data sheets in batches of 200. It was agreed with the Computer Unit that all the data sheets would be punched and verified.

After an initial inspection of a listing of the punched cards, changes were made in the punching instructions to cope with desirable modifications to the input format of the bibliographical data. An earlier decision to reduce punctuation and grammatical detail, i.e. the omission of commas, hyphens and apostrophes, leaving only alphanumeric characters, was rescinded. The omission of these features, to give ____mplified sorting sequence, produced a print-out of the data which was difficult to read and which looked unusual; consequently the features have been retained.

5.1.3 Performance

A trial run was made with punching the data. Three main difficulties occurred almost immediately:

- (i) unfamiliarity with the data being interpreted from CLOSSS data sheets;
- (ii) variable legibility of entries on the data sheets;
- (iii) unfamiliarity with foreign language titles and publishers.

After the first trial batch about 50% of the records were repunched at the verification stage; on the second batch, this figure fell to about 20% of the records, but this was still obviously excessive. Further manual editing was done on the third batch, concentrating on handwriting and layout to ensure that punch operators could read the data character by character, without he need to pause to consider words and phrases. Repunching of this batch reduced the errors to only 8% of the records. As a result the Polytechnic of North London agreed to re-edit the remaining data sheets to ensure at least this standard.



As a result of these trials and modification to procedure, 200 records can be punched and verified in six hours, which is approximately one man-day's work. The normal working rate for punching CLOSSS records has been about 400-800 per week.

Taken across the whole data, about 30% of the records have required some kind of alteration to usually one but occasionally more than one field. In the whole file one change is required for about every 48 fields, which averages out to change required in 2% of all individual data fields.

5.2 File creation

It was felt desirable to retain a close relationship between the original data and the machine file; the file has been created in such a manner as to reflect this.

5.2.1 Programs

There are four main areas where program development is necessary:

- (i) handling punched cards
- (ii) creating magnetic tape file
- (iii) updating magnetic tape file
- (iv) exploitation of file.

A program to print out the data fields in each record was developed. This was expanded so that old format data field codes were converted to new format field codes, and the fields in both old and new format records were sorted into ascending field code sequence. The last appearance of a particular field code in the record is taken to be the field code and data for the record; this proved useful, because it enabled incorrectly punched data to be reinserted at the end of the punched card record. Coded data fields were then translated, and the translated data together with the codes were printed. Uncoded data fields were checked to ensure that they contained only valid characters, e.g. either wholly numeric, or alphanumeric. For certain numeric fields, comments were inserted to make the numbers more meaningful and to facilitate easier checking of the data; for example, in field 18, the word ARTICLES was inserted after the number



held in the record, and for field 19, the data, punched in pence, was printed with a £ sign and converted to pounds/pence format.

This program was developed into a program to create the data records on to the magnetic tape file and as a result a trial file of the first 700 CLOSSS records was produced. The create program was then developed into a complete update program, by which not only can complete records be listed, inserted, replaced, or deleted, but also individual fields in a particular record can be inserted, replaced, or deleted.

Throughout the whole development period, slight changes were made to the data vetting procedures for certain field codes. The complete CLOSSS file has then been created using the final version of the update program; using this program the major job of file creation was done progressively over a period of approximately 10 days.

5.2.2 Summary of record handling requirements

Record handling on the magnetic tape file involves the following main stages.

- (a) Creation stage/updating/editing:
 - (i) replacement of complete records
 - (ii) deletion of complete records
 - (iii) modification of records (on update only). This involved adding to, changing and deleting fields
 - (iv) listing records.

These four functions are all provided for in the update program described in section 5.2.1.

(b) File exploitation:

The first stage of using any particular CLOSSS record is to index it on the machine in order to produce a table which can then be used for processing the data.

- (i) searching records for the fields required
- (ii) counting
- (iii) listing records or individual fields. One of the first lists produced will be an alphabetical list of serial titles and other data involving fields 01, 02, 03, 04, 06, 11 and 13
 - (iv) relating fields, i.e. to produce tabulations.



5.2.3 Data Vetting

The data-vetting requirements are set out in Appendix J. Using the computer to vet data involves the printing out of messages if a mistake appears in the format of the data, e.g. records out of sequence, field codes out of range or omitted. If the record appears to be in the correct format, then it can be created.

The data-vetting routine first isolates each data field. Non-coded data elements are checked to ensure that they contain only valid characters, e.g. either numeric or alphanumeric, and numeric fields are checked to ensure either that they do not exceed a maximum length, or that they are of a fixed length and between certain values, e.g. field 18 up to 3 numerics; field 05, 4 numbers, checked to be a valid date. Coded data elements are checked to be of the correct length for the field codes and that the codes translate, i.e. match against an entry in a list of codes for the particular field.

Messages are printed out against an entry which appears to be invalid or requires checking as the fields are listed. The machine vetting is supplemented by proofreading a print-out of the records.

Examples of print-out are given in Appendix K.

5.2.4 Proofreading

Proofreading the print-out made from the punched cards before the records are created on magnetic tape provided a manual data vet and chance to scrutinise punched records, and an opportunity for an inspection of the bibliographical data. Examination of records prompted modifications to vetting procedures and a chance to clear up many minor problems of both data and bibliographical rature before final creation of the file.

Proofreading the completed file will be done in the first half of 1973 by Bath and PNL; see Appendix L for description.

6.0 ANALYSIS

6.1 The adequacy of the data base for the purposes of the project

The serials data file is the base for a descriptive survey of the serial literature of the social sciences, with particular emphasis on size, growth and distribution by subject, language, country, form, content and origin.



The establishment of a comprehensive list of social science serials data was originally considered to be desirable for a descriptive bibliometric survey.

The present coverage of serial titles on the file cannot represent a comprehensive collection; the simplest reason exists for this, namely that data collection has not exhausted all possibilities of search for individual titles. Resources available have not permitted an exhaustive data collection; to fulfil a search, even under the selective criteria for including titles, would require investigation of practically all likely collections of serials.

Ignorance of the size of the population and the inability to estimate it with any precision, even if the insoluble problem of subject boundaries is left out of account, creates a very serious initial barrier to any statistical study of parameters of the literature.

Continued and exhaustive data collection could have resulted in a data file more comprehensive than the present one, but the requirements of the DISISS analyses alone were not thought to justify the extra expense.

The data base for the descriptive study represents a very large sample (of a type unspecified) but probably stratified by subject on account of the libraries so far chosen for data collection, from a population whose size and extent are only imperfectly known.

It is thus necessary to consider the texture of the sample as a positive strength, rather than to judge it in solely quantitative terms. If texture is measured by content of serial titles relevant to the social sciences the present data base still provides a useful collection for a parametric analysis. Positive features include:-

- (i) The collection of titles was based on some core subject specialist libraries in the social sciences; the most significant titles should therefore be included.
- (ii) Titles generated from citation analysis using a broad spectrum of sources are being added to the data base.



- (iii) A high percentage of titles cited in the main citation study have already been identified on CLOSSS, indicating convergence of CLOSSS and journal citation frequency lists on the main social science titles.
 - (iv) The descriptive information so far collected for the titles on the file is good.

On the other hand some weaknesses are apparent in the following areas:

- (i) Geographical coverage of serial titles. Neither core library collections nor citation frequency lists ensure representative international coverage in the sample. Checking national bibliographies is still necessary before a high level of coverage and accuracy of analysis can be achieved; checking national bibliographies would be an early task if further resources were available. Deficiencies in geographical coverage will have an effect on coverage of foreign language material: at present some English language bias is inevitable.
- (ii) Coverage of 'dead' serial titles. This deficiency has been mentioned previously, in connection with the omission of the British Museum Library from the data collection.

 There are occasions when it is not always easy to recognise mortalities in titles, either through changes in title or ceasing of publication. Deficient data in this area could affect the historical picture of growth and size, particularly when attempting to correct for mortality or when applying a correction for growth to the calculation of citation decay and obsolescence rates.
- (iii) Peripheral material, especially non- or semi-scholarly serials, trade publications, newsletters, official publications, etc. Material of this type has inevitably become included in the file; thus, when interpreting the analyses the level of description must be stated and care taken in making generalizations. Statements, for example, about

Some work has already been done on identifying national and subject orientated bibliographies of serials.



'scholarly' periodicals would require analysis of a good deal less than the total file; similar provision would apply if distinctions were required between 'serials' and 'journals', etc.

(iv) Coverage of different forms of serials, i.e. journals ('scholarly', 'popular'), annual reports, monographic series, secondary publications. There is very little evidence available for the distribution of these classes in the bibliographic population as a whole and it can only be hoped that their distribution in CLOSSS is approximately correct.

These limitations must be acknowledged in attempting a descriptive survey of the social science serial literature from the present data base. The main bibliometric measures proposed are described in the following section, and in calculating many of them the problems described above will be clarified or at least become thoroughly apparent; when a distribution looks suspiciously irregular, perhaps conflicting other findings, there will be good grounds for going back to the original data and considering the sampling and data collection aspect again. The analysis will very likely result in the testing of the sample by trial and error - not an orthodox statistical technique, but one useful in a field such as this where there are few precedents.

The first round of analysis will be 'pilot' in nature and may be important in showing the direction for future work on CLOSSS, in data collection and a continued programme of analysis.

6.2 Parameters of the literature

The potential number of analyses which could be achieved by manipulation of the CLOSSS file in machine readable form is considerable in terms of single variable counts and two-way and three-way tabulations.

In practice the number of analyses performed will be much fewer, determined by (i) the legree to which measures appear useful to the



understanding of existing information systems and the design of future ones, and (ii) restrictions imposed by a low density of data in some areas.

It is often desirable to present data of the type gathered for the CLOSSS file from a subject point of view. Although CLOSSS records are subject coded, the allocation of subject terms to serials was made subjectively. Because the validity of the existing subject classification of serials is justifiably open to criticism the subject analyses of the file will be limited, and should be viewed with caution, at least until empirical evidence from the clustering analyses can be applied to group journal titles together into subject areas.

It is suggested that the measures indicated in this section provide sufficient material for a broad overview of the serial literature of the social sciences. All the major parameters are covered; where positive trends appear, further data collection and analysis may be desirable. The proposed measures have been divided into two groups: the first group is concerned with size, growth and mortality parameters; the second group with other descriptive characteristics of the serial literature related to 'populations' generated by the first group of analyses.



PRESENTATION

SCOPE.

DERIVATION

DESCRIPTION

IABLE 4. LIST OF descriptive analyses based on the serials data file.

~"	A. SIZE, GROWTH AND MORTALITY OF SERIAL	SERIAL LITERATURE		
ı.	Total size of data base .	Count on CLOSSS numbers		•
la,	Current titles (current and subsequent titles)	Identify and subtract previous and subsequent titles	number of titles at	•
1b.	Previous titles (previous titles of titles currently published)	Identify and subtrac: current and dead titles. Previous titles are those titles with data in field (22)	Serials = Periodicals + Monographic Series	Tables
1c.	Dead titles (publication ceased)	Identify and subtract current, previous and subsequent titles. A dead title has an pending date and no subsequent title.	•	4.
2a.	Total number of periodicals			6,
2b.	. Number of current periodicals	Count on CLOSSS field (12) and	Size	
2c.	Number of previous titles , periodicals .	7		i autov
2d.	Number of dead periodicals	,	•	
За.	Total number of monographic series		~	
3b.	Number of current monographic series	Count on CLOSSS field 12 and file from 1-1c	Size at 1969/1970	Tables
Зс.	Number of previous titles monographic series	•		•
3d.	Number of dead monographic series.			· ·
				•

Full			•	·.
RIC ext Provided by ERI	DESCRIPTION	DERIVATION	SCOPE	PRESENTATION
ें स्	Growth in number of serials	Count on 'CLOSSS field 5	Total data base.	
	Growth in number of periodicals	Allow for previous	titles (i) Anual growth	. Tables and
မှ	Growth in number of monographic series		increment (ii) Cumulate to	graphs ,
			give annual. growth curve	
7,	Mortality in number of serials	Count on CLOSSS field (6)	Total data base available.	
ω .	Mortality in number of periodicals	Allow for previous titles	Annual mortality of titles	Tables
.6	Mortality in number of monographic series		1 1	- ن ند
10a.	Number of serial titles (current and dead) in any year	From CLOSSS fields (4), (5)	A measure of	
10b.	Number of periodical titles (current and dead) in any year	and (6)	total stock in a given year	Tables
1002	Number of monographic series titles (current and dead) in any Mear			
11a.	Number of current serial titles in any year	ence SSS	ું ધૂતું મું	Tables
11b.	Number of current periodical titles	5 and 8 aralyses 3 and 9 'listed above	year ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	æ (*)
11c.	Number of current monographic titles in any year	•		
	-			

-35-

* PRESENTATION

B. CHARACTERISTICS OF THE LITERATURE

defined by any base generated in 1-11 above at any period in time covered by previous analysis of the file. The following measures 12-27 can be tabulated for serials, periodicals or monographic series

SINGLE VARIABLE ANALYSES

12. Frequer 13. Types 14. Countrible.	Frequency of issue		Survey at several points in time, by using lla/llb/llc	Table
	of issuing body			
*		Count on CLOSSS field (9) for each category	Survey at several points in time, by using lla/llb/llc	Table
	Country of publication	Count on CLOSSS field (11) for each country category.	Survey at several points in time, by using lla/llb/ilc	Trble Serial titles
	Language of contents	Count on CLOSSS field (16) for each country category	Survey at several points in , time, by using lla/llb/llc	, Table Serial titles
16. Type o.	Type of serial	Count on CLOSSS field (13) for each category. Straight counts as in 1 and 2	Survey at several pointstin time, by using lla/llb/llc. Possible confirmation with	Table 69
i7. Nature (e.g. a	Nature of contents of serial (e.g. articles, abstracts, etc.)	Count on CLOSSS first (14) for each category or combination of categories		Table
18. Presence articles	Presence of abstracts with articles	Count on CLOSSS field (15)	Proportion of primary literature available as direct input to 'secondary services	Table
19. Number of 1970	of articles at 1969/	Count on CLOSSS field (18)	Volume of output in terms of articles	, Table , Serial titles

PRESENTATION	Table		Table Serial titles		Tables Serial titles	Tables Serial titles ,	Tables 1	a				
SCOPE	Average price; price categories		Subject distribution of serials				4.				•	
DERIVATION	Count on CLOSSS field (12)	Count on field (17)		by any base generated in 1-11 above	Count on field (11) and (17)	Count on field (16) and (17)	Date defined by measures 2a-2d, 10a-10c and 11a-11c Count on field (17)			-	•	
DESCRIPTION	Price	Subject of serial	Subject of periodicals 'Subject of monographic series	TWO WAY ANALYSES , Defined b	Subject by country	Subject by language	Subject by date	Country by language	THREE WAY ANALYSES	Country by number of current titles by different years	Language by number of current titles by different years	•
ERIC Pruit frest Provided by ERI	20.	21a. °	21b.		. 22.	23.	24	25.		26.	. 27.	

6.3 Presentation of serials and bibliometric data

Four main types of presentation can be generated from the data base; in some measures more than one presentation can be used. The main types are:

- (i) Tabulation
- (ii) · Histogram charts; bar diagrams
- (iii) Graphical plots on a variety of scales
- (iv) Lists of serial titles.

Tabulations and listings can be produced directly from the machine file; histograms, bar diagrams and graphical plots will be prepared from the tabulations by hand.

7.0 · PROSPECTS

7.1 Future requirements for DISISS

The objective for 1973 and indeed the remainder of the current project is to have available a fully operational machine file of serials data. The file will meet the standards discussed in this working paper and be adequate for the bibliometric analyses which are an integral part of the research project. The objective will be met early in 1973 when programs will be written and available for use; by then, a limited amount of supplementary data collection may have taken place, but not to the full extent of the possibilities reported in 3.3.

The bulk of the work to be undertaken in 1973 consists of bibliometric analyses of the file, evaluation and presentation of results.

A print-out of the machine file will become available and it is planned to give this limited circulation to interested bodies.

7.2 Conclusion and future prospects

Dissemination of a variety of printouts of the machine file may serve as a stimulus towards further development of the CLOSSS file as a source of social science serials data.



Working Paper no. 2 considered a number of possibilities in some detail; suggestions made in that working paper have yet to be followed up, but in the meantime DISISS has taken note of similar projects and maintained and/or initiated contact with a number of bodies. Brief details are as follows (with no preference or degree of involvement implied in the order of mention).

The National Library of Australia is looking at the conversion of Union list of serials in Australian libraries: social sciences and humanities to machine readable format using MASS.

In India a Social Science Documentation Centre has been established and proposes the creation of a union catalogue of social science serials in Indian libraries.

The American Bibliographical Centre/Clio Press has expressed interest in CLOSSS and was able to point to work on social science and humanities serials being done by Kent State University Press in the form of a series of publications - Academic writer's guide to periodicals.

Work being done in France has been reported to DISISS; social science serials data forms one of the interests of the Groupe de travail sur l'analyse des périodiques (GTAP). The project is under the leadership of Jean Meyriat and is connected with the establishment of a union catalogue of periodicals in sciences and humanities in libraries in the Paris area. Meyriat is also involved with the UNESCO World list of social science periodicals and here a convergence of activity is possible.

At international level there is continued activity focussing on the International Serials Data System (ISDS) and the International Standard Serial Number (ISSN). The ISDS proposal (Martin and Barnes, 1970) has been broadly adopted by UNISIST and a centre has been established in Paris for the control and allocation of ISSNs through a number of bibliographical centres. The International Organization for Standardization (ISO) is also active in the development of ISSNs and a first draft proposal has been prepared². Substantial agreement has been reached

Aslib Proceedings, 24(8), 1972, p.438.

International Standard Serial Numbering (ISSN)(First draft proposal), ondon, British Standards Institution. Document No. ISO/TC WG/46 1 (Secretariat - 30) 45E, June 1972, Private circulation.

at an international level that bibliographical activity in the social sciences should be given no less attention than in the natural sciences and technology.

Recently the final report of the National Serials Pilot Project in the USA (Johnson, 1972) has become available. Although a national project, its bibliographical implications are potentially world wide.

Although of course no substitute for an international serials data file using accepted record formats and with unique standard numbering, the CLOSSS file may necessarily serve a useful purpose, at least in the short term, as a fairly comprehensive file of social science serials. If wider interest is shown in it, the file could be developed and expanded, both in titles and in record content; such a development would fall outside the time-scale and scope of DISISS, but we believe it is important that the existence of CLOSSS should be generally known.



References

DESIGN OF INFORMATION SYSTEMS IN THE SOCIAL SCIENCES (1971). Proposals for Research, 1971-1973. Bath, Bath University Library, March 1971, (Unpublished).

GORMAN, M. and LINFORD, J.E. (1971). Description of the BNB MARC record: a manual of practice. London, British National Bibliography, 1971.

GOTTSCHALK, C.M. and DESMOND, W.F. (1963). Worldwide census of scientific and technical serials. American Documentation, 14(3), 1963, 188-194.

JOHNSON, D.W. (1972): <u>Toward a National Serials Data Program: final</u> report of the National Serials Pilot Project. Washington, Association of Research Libraries, 1972.

MARTIN, M.D. and BARNES, C.I. (1970). Report on the feasibility of an International Serials Data System, prepared for UNISIST/ICSU - AB Working Group on Bibliographic Descriptions. London, INSPEC/IEE, 1970, DM/CB/284.

ROBERTS, S.A. (1971). A machine readable data base of social science serials. Bath, Bath University Library, November 1971. (DISISS Working Paper no. 2).



APPENDICES



APPENDIX A. DATA COLLECTION SHEETS

(i) Pilot version ('old' data).

DISISS - SERIALS DATA RECORDING SHEET

PLEASE NOTE	(1)		in the field c			re possible	e from inspecti	on of copies	and the
	(2)	Checking from	n published bib ked (*)	liographi	es wil	l be done l	ater by the ed	itors, espec	ially for
, ,	(3)		more than 5 -				. Rechecking	will be done	later by
NAME OF COLI	ECTOR		-				,		
LIBRARY WHEN			,						
		(6), (17), (18)	WHICH DATA REC and (19), WHE ISSUES (Where	RE THE DA	TA IS	VOLUME/ISSU	E SPECIFIC	QUESTIONS:	(10), (12),
	_							· · ·	
DATA ELEMENT	rs 		THE ITEMS (*) SHOULD	BE THE	MINIMUM RE	CORDED	*	
*(1) TITLE		. as it currently)					<i>t</i> '		
(2) ALTERN	WTIVE TI	TLE(S)			,				
(3) FORMER	TITLE(S)		-	<u>-</u>		 .	· .	
				0	•				
	IN ENGLI								
(5) PUBLIS	HER				*				
(6) PUBLIC	ATION SP	ONSOR		_			-		
(i (i	11) : iv) Gov		r professional	body		(vi) (vii) (viii) (xi) (x)	Educational in: (ii) + (vi): (i) + (vi) Private body of International	or firm	
(7) BÉGINN	ING DATE	16	· · · · · · · · · · · · · · · · · · ·		*(8)	ENDING DAT	E, IF ANY		

(9)	COUNTRY OF PUBLICATION	
*(10)	NUMBER OF ISSUES PER ANNUM	
*(11)	TYPE OF SERIAL	Periodical Monographic series
*(12)	TYPE OF MATERIAL	Journal Abstracts Index to research/theses Yearbook Fixed period report Contents list Book review Bibliography Statistics Index to research/theses Yearbook Fixed period report Conference proceedings Legal (legislation, report, articles) Cases and case notes Accessions list
	NATURE OF CONTENTS Indicate three main areas by a cross. Tick for minor features	Articles Abstracts Indexes Bibliographies Contents lists Book reviews and (new publications (Not advertisement) Cases and case notes Accessions lists News articles Review articles
*(14)	LANGUAGE(S) OF CONTENTS	
(15)	SUBSCRIPTION PRICE (1960) (Please indicate where alternative data is used)	
(16)	COVERAGE BY INDEXING AND ABSTRACTING SERVICES (Where this is listed within the item)	
* (17)	ABSTRACTS WITH ARTICLES All main articles None	*(18) NUMBER OF ARTICLES in 1969 (Listed main article in index/list of contents)
*(19)	ASSESSMENT OF SUBJECT CONTENT	

ERIC

Take as guidance the prepared list of subject headings in the Manual and use or modify accordingly

Political science.

public administration, public law, international relations and peace research, comparative politics, political theory, the study of policy making, political behaviour.

Psychology.

clinical counselling, educational, experimental, personality, social, industrial and applied psychology, and social psychiatry.

Social policy and social.

Administration.

social work, social-problem-orientated studies (e.g. poverty), professional training for social workers. Social medicine, leisure.

Sociology.

economic, organisational, political, rural and urban sociology, the sociologies of knowledge, law, religion, and medicine. Human ecology, the history of social thought. Sociometry and other small group research, survey research, mass communications, demography.

Statistics and research methodology.

the design of experiments and other (1) rms of data collection, sample surveys, government statistics, and the use of statistical methods in social science research, methods of social science research, operational research.

This table was reproduced in the data collection manual prepared for students. One of the main purposes of this fairly detailed, although somewhat 'ad-hoc' list,' was to ensure that data collectors were reminded of some potentially relevant areas which might otherwise have been overlooked.



	(9) TYPE OF ISSUING	BODY			
•	Association(s), Society, Prof. Body (Membership instns) Publisher	Government (National, Local) Educational institution Political/pressure group	ps []	International Organization (i.e., UN, EEC, NATQ) Commerceal/business enterprise Private/individual	
	OTHERS (Descrip	otion/type)		•	•
	(10) PUBLISHER (Name	>)			
\	(11) COUNTRY OF PUBI	.ICATION .	· ·-		
	* (12) TYPE OF SERIAL	graphic representation — 1 Mg. of the 1988 — September 7 is a confident design of the 1988 and 1988 and 1989 an		1	
		Periodical	[]	Monographic series .	,
_	* (13) DESCRIPTION OF	SERIAL (Tick one category)		,	
	Periodical journal Abstracts Indexes Contents list Book reviews	Bibliography Statistics Index to research/theses Yearbook	s	Fixed period report Conference proceedings Legal/legislation, report articles Cases and case notes Accessions list	
	OTHERS (Indica	te tvpe)			
• •	* (14) NATI'RE OF CONTI	ENTS (Indicate major categor	ies by	cross and minor features by tick)	
	Articles Abstracts .Indexes Bibliographies OTHERS (Indica	Contents lists Book reviews and new publications (not advertisements) Conference proceedings		Cases and case notes Accessions lists News articles Review articles	
_	* (15) ABSTRACTS WITH	ARTICLES (Tick in boxes)			
	All main artic			None 🔲	
	* (16) LANGUAGE(S) OF	CONTENTS .	•		
	* (Y7) ASSESSMENT OF	SUBJECT CONTENT (Take as gui	dance t	the prepared list of subject headings)	
_	* (18) NUMBER OF ARTICLE (Listed main a index/list of	rticles in	(19)	SUBSCRIPTION PRICE (1969) (Please indicate where alternative data is used)	•
	(20) COVERAGE BY IV	DEVING AND ABSTRACTING SERVI	CES (W)	nere this is listed within the item)	

APPENDIX B.

SUBJECT HEADINGS: Guidelines for subject coverage of serial titles on CLOSSS file.

Subject categories.	Guidelines for sub-areas to be included.
Social and behavioural science.	for a serial publication covering all or several disciplines.
Anthropology.	cultural, economic, political, social and applied anthropology, as well as ethnography and ethnology.
Criminology.	relationship of law to the other social sciences, criminology, penology.
Economics.	econometrics, the history of economic thought, economic development, agricultural economics, industrial organisations, international economics, labour economics, money and banking, public finance.
Education.	pedagogy, philosophy of education, methods and technique, curriculum development, educational training.
Environmental planning.	town and country planning, ecology.
Ergonomics.	the relationship between man and his physical environment, heat, light, noise, vibration, man-machine interfaces, human biology, architecture and the use of buildings, vigilance and inspection.
Futurology.	social predictions and forecasting.
Geography.	cultural, economic, political and social geography, not physical geography.
History.	primarily social and economic history.
Linguistics.	general, applied and social linguistics, semiology.
Management.	management techniques, personnel, O & M, systems analysis.



Political science.

public administration, public law, international relations and peace research, comparative politics, political theory, the study of policy making, political behaviour.

Psychology.

clinical counselling, educational, experimental, personality, social, industrial and applied psychology, and social psychiatry.

Social policy and social.

Administration.

social work, social-problem-orientated studies (e.g. poverty), professional training for social workers. Social medicine, leisure.

Sociology,

economic, organisational, political, rural and urban sociology, the sociologies of knowledge, law, religion, and medicine. Human ecology, the history of social thought. Sociometry and other small group research, survey research, mass communications, demography.

Statistics and research methodology.

the design of experiments and other (Jrms of data collection, sample surveys, government statistics, and the use of statistical methods in social science research, methods of social science research, operational research.

This table was reproduced in the data collection manual prepared for students. One of the main purposes of this fairly detailed, although somewhat 'ad-hoc' list,' was to ensure that data collectors were reminded of some potentially relevant areas which might otherwise have been overlooked.



LIBRARIES VISITED DURING FIELD DATA COLLECTION

- Advertising Association,
 Bell Yard, London, WC2.
- Department of Employment and Productivity Library,
 11/12 St. James's Square, London, SWI.
- Department of the Environment, Whitehall, London, SWI.
- 4. Language Teaching Library,63 High Holborn, London, WC1.
- 5. London School of Economics,
 British Library of Political and Economic Science,
 Houghton Street,
 London, WC2.
- 6. National Institute of Economic and Social Research,
 2 Dean Trench Street,
 Smith Square,
 London, SW1.
- 7. Royal Institute of International Affairs, 10 St. James's Square, London, SW1.
- Royal Institute of Public Administration,
 24 Park Crescent,
 London, W1.
- 9. Royal Geographical Society, Kensington Gore, London, SW7.
- 10. University of London, Senate House Library, Malet Street, London, WCl.
- 11. Government Social Survey Department,
 Atlantic House,
 Holborn Viaduct,
 London, EC1.
- 12. Tavistock Institute of Human Relations and the Tavistock Clinic, Tavistock Joint Library, Tavistock Centre, Belsize Lane, London, NW3.
- 13. Royal Statistical Society, 21, Bentinck Street, London, W1.

APPENDIX D.

NLLST SERIAL HOLDINGS LIST CONVENTIONS USED WHEN CHECKING

These conventions were developed to assist a practical checking exercise on a print-out of the NLLST serial holdings. They are reproduced to illustrate the need for and evolution of practical criteria.

Symbol for Marking



Notes

Definite social science material with decision based on:

- (a) title: containing keywords corresponding to INFROSS/OECD social science vocabulary.
- (b) personal knowledge.

Probable social science material.

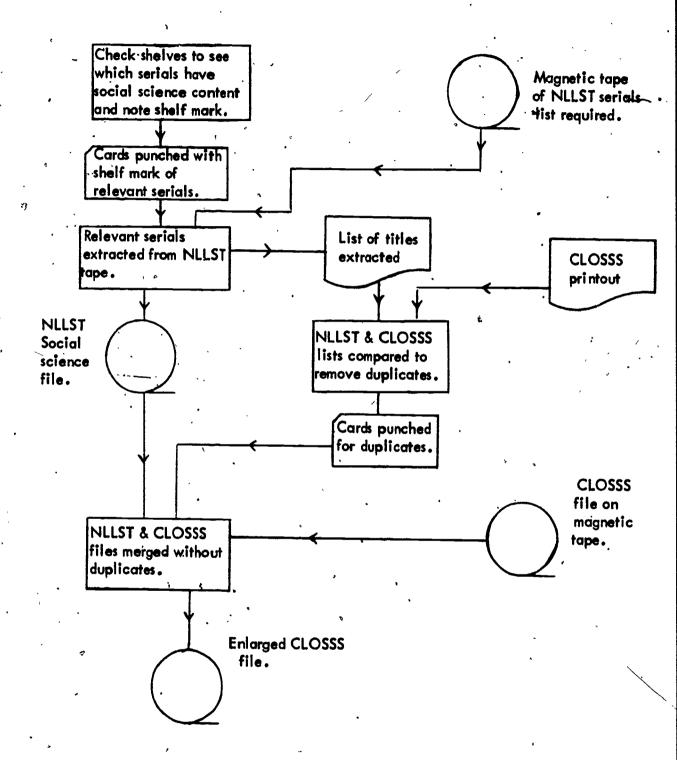
- (a) All non-indicative titles should be checked: i.e. ODZIEZ; PHI DELTA KAPPAN, etc.
- (b) Suspected relevant material from marginal subjects.
- (c) Suggestive foreign language titles.
- (d) "General" journals.
 - (e) Annual reports, yearbooks, occasional publication series.
 - (f) Relevant applied and practitioner literature; i.e. some agriculture journals contain economic material. Inclusion of these titles must be on the basis of checking content at NLL store.

General points

- 1. If in doubt include. Decisions on 'marginality' can be checked later.
- 2. Use pencil only when marking-up.

APPENDIX E.

PROCEDURE FOR ADDING NLLST SERIALS TO CLOSSS



APPENDIX F.

SOME ESTIMATES OF SIZE AND COMPOSITION OF THE SOCIAL SCIENCE SERIAL LITERATURE.

Summary of subject weighting values obtained for social science serials.

The following notes describe the calculation of subject weighting values and serve to assist in the interpretation of the data presented in the table. (see over). The weightings were originally intended to assist in the selection of a sample of source journals for the citation studies.

Subject classification

The classification has been derived from Dewey/UDC and is akin to the scheme used by Woodworth (1970) for the social sciences. The classification in WLOSSP and Ulrich has been made broadly compatible with Dewey/UDC. For convenience, 21 subject headings, based on the general schemes above, have been used in this exercise.

Serial populations

- (i) Woodworth (1970). Lists current British serials/journals in classified order. N = 872 social sciences titles.
- (ii) WLOSSP (1966). N = 1321 social sciences titles. The 142 subject indexing terms in WLOSSP were allocated between the 21 subject headings. The subject distribution of references to journal titles in the subject index was calculated. On average each journal title is referred to under two subject terms and in all, 2598 references to journals are made in the subject index, this being approximately twice the number of unique journal titles recorded. In making a subject distribution of 1321 journal titles the average distribution of references to journals from the subject index is assumed. The distribution derived by this method is crude but adequate.
- (iii) Ulrich (1970). Current serials in a classified listing with world-wide coverage. N = 10923 social science titles.
 - (iv) CLOSSS. 100 titles selected at random from CLOSSS data base.

Method of calculating proportions of classes (columns 1-5)

This calculation produces the weighting of titles in each subject;

No. of titles in each subject class x 100



The state of

Applying this formula to the serial populations gives the values in columns 1, 2 and 3; these values are used in calculating the values in columns columns 1 and 5. The values (columns 1 to 4) were originally calculated to 3 places of decimals, but are given here as whole numbers, by rounding up and moving the decimal one place to the right.

e.g.
$$0.915 = 9$$
; $5.538 = 55$, etc.

Columns 6 and 7 contain values based on a random sample of titles from CLOSSS.

Weights for sampling (columns 8-12)

The values given, based on data in columns 1-4, provide possible distributions of serial titles across subject classes. Data on serials in philosophy, history, area studies and "general" serials was not used in calculation of sampling weights, mainly because it would have created further bias.

Columns 8, 9 and 10 give distribution values for samples of various size (sample size depending on the proportion of titles which remain in the particular serial population after excluding titles in the classes mentioned above). In column 11 a mean is calculated from values in columns 8, 9 and 10; the mean values are expressed as a ratio equivalent to a percentage; in column 12 the same procedure is repeated on the random sample from CLOSSS.

Interpretation

The values derived are very crude. It is not possible to make any absolute direct comparisons owing to the varied nature of the original sampling frames. At best, inspection of the values gives a relative idea of subject scattering, perhaps best summarized in the arithmetic mean in column 4 and in the mean sampling weights (column 11) and CLOSSS derived sampling weight (column 12).



	Area Studies	History	Criminology	Geography	Environment	Business Management	and Customs/Folklore	Anthropology, Archeology	Language	Commerce	Education	Social Welfare	Public Administration	Law	Economics	Politics	Statistics/Demography	Sociology	Social Sciences General	Psychology	"General" (incl. Phys.Sci.)		Subject	-	
,	o	. 0	0	00	16	192	47	·••	11	122	122	86	39	48	83	39	15	10	12	16) 144		Woodworth ¹	1	
		27	5	6	7	44	90		18	10	13	62	20	92	237	129	43	86	34	4.	2	13	WLOSSP ²	2	·
	9	55	9	14	51	151	26		28	30	124	55	31	61	130	112	24	24	11 .	34	0	20	Ulrich ³	3	
	1	1	,	25	25	129	54		19	54	86	68,	30	67	147	93	29	40	16	18	48	15	n cols. 1, 2 and 3	4	
	1	1	,	. 030		.159	.066	-	023	. 066	.106	.084	.037	:	.181	.115	. 035	. 049	eto.	. 022	1	1	Values in col. 4 as ratio of 1	51	
	4	4	-	G	N	4	۲	,	12	ယ	7	4	4	—	13	5	4	6	5	8	0	H	CLOSSS ^{4,5}	6	Column
	. 042	.042	• ō10	. 053		. 042	.010		127	. 032	.075	.042	.042	.010	. 138	. 053	. 042	.063	. 053	.085	,	3	Values in col. 6 as ratio of 1	7	
	ı	1	i	H	-	10	6	,	;	14	14	10	CJI	1	10	თ	N	H	-	2	;	1	Woodworth For sample, n = 75	∞	
	1		1	H	–	Ŋ	10	t	N 1	—	,	7	N		26	14	5	10	4	5	-	1	WLOSSP ² For sample, $n = 74$	9	
	1	1	1	N	6	17	ယ		ى د	ا دنا	14	5 1	ယ	:	14	12	ω	ယ	_	4	ı	•	Ulrich For sample, n = 94	10	
	1	1	1	ω	1	9	7		٠.	7	11	00 ,	4	;	19	11	4	თ	ผ	22	. 1	1	n cols. 1, 2 and 3. For sample, n = 101	11	
	1	1	1 '	6	8	ۍ <u>ا</u>	<u> </u>	1	1 4	2 (20 C	י תע	บา	1	16	o	(J	7	6	10	1,	•	CLOSSS ⁴ For sample n = 100	.12	

TABLE KEY

(i) Sources of data

- Woodworth, D. <u>Guide to current British journals</u>, London, Library Association, 1970.
- WLOSSP: World list of social science periodicals, Paris; UNESCO, 1966
- Ulrich's international periodicals directory, New York, Bowker, 1970.
- 4 CLOSSS: Check List of Social Science Serials.
- Four library science titles drawn in sample not included.

(ii) Column values

*		
Column	Source	<u>Units</u>
1	Woodworth	Percentage ratios converted 'to whole numbers
2	WLOSSP	Percentage ratios converted to whole numbers
3	Ulrich .	Percentage ratios converted to whole numbers
4	Mean (n) of cols. 1, 2 and 3.	Percentage ratios converted to whole numbers
. 5	Mean (n) of cols. 1, 2 and 3	Values from col. 4 expressed as ratio of 1.
. 6	CLOSSS	Distribution of titles from CLOSSS (n = 98)
7	CLOSSS	Values (from col. 6) expressed as ratio of 1
8		Distribution values for drawing a sample of 75 titles, based on ratios in col. 1
9 ,	WLOSSP	Distribution values for drawing a sample of 94 titles, based on ratios in col. 2
10	Ulrich · (Distribution values for drawing a sample of 94 titles, based on ratios in col. 3
11	Mean (n) of cols. 1, 2 and 3	Distribution values for drawing a sample of 101 titles, based on ratios in col. 4
12	CLOSSS	Distribution values for drawing a

sample of 100 titles, based on

ratios in col. 6



APPENDIX G

*SOME BIBLIOGRAPHICAL SOURCES CONSULTED DURING EDITING OF CLOSSS DATA

Boehm, E.H. and Adolphus, L. <u>Historical periodicals</u>: an annotated world <u>list of historical and related serial publications</u>. Santa Barbara, Clio Press, 1961.

British union catalogue of periodicals. London, Butterworth, 1955-58, 4 vols.

Camp, W.L. Guide to periodicals in education. Metuchen, Scarecrow Press, 1968.

Current serials: available in the university library and in other libraries connected with the university 1970. Cambridge, University Library, 1971.

Educational periodicals, Paris, UNESCO, 1963.

Erdelyi, G. and Peterson, A.F. A checklist of German language serials and series currently received in the Stanford University Libraries. Stanford, Stanford University, 1967. (Hoover Institution, Bibliographical series, 27).

Harris, C.D. and Fellmann, J.D. International list of geographical serials. Chicago, 1960 (University of Chicago, Department of Geography Research paper no. 63).

Irregular serials and annuals: an international directory. Emery Koltay ed. lst ed. New York, Bowker, 1967.

New serial titles. Washington, Library of Congress, 1955- .

Rodgers, F. Serial publications in the British parliamentary papers 1900-68: a bibliography. Chicago, American Library Association, 1971.

Ulrich's international periodicals directory. 13th ed., 1969-70, New York, Bowker, 1969, 2 vols.

University of London. Library. <u>List of current periodicals</u>. London, University of London Library, 1969.

Vesenyi, Paul E. <u>European periodical literature in the social sciences</u> and the humanities. <u>Metuchen</u>, Scarecrow Press, 1969.

Willing's Press Guide 1971. London, James Willing Ltd., 1971.

Woodworth, D. comp. Guide to current British journals. London, Library Association, 1970.

World list of social science periodicals. 3rd ed. Paris, UNESCO, 1966.



APPENDIX H.

CODING SCHEME AND INSTRUCTIONS

1. General Instructions.

Stage 1. (Preparation)

Number sheets with 5-digit nos. using an automatically advancing stamp in the top left-hand corner. Batch them up in lots of 200 and number the batches. With each batch put a sheet for noting down queries during coding.

Also number some batches of blank data sheets for coding previous titles.

Stage 2. (Coding)

Each coder will need:-

- A) Instruction sheets
- B) Dummy data recording sheet showing codes for coded data elements.
- C) Sheet showing short lists of codes for
 - i) country of publication
 - ii) languages
 - iii) conversion factors for subscription prices
- D) Copies of full lists for countries and languages
- E) Sample of coded data sheet
- F) Codes for subject content.

The coder should work through one batch at a time, keeping the sheets in order. Queries should be noted.

Stage 3. (Queries)

One distinct category of queries, (transliterations required) will come up as well as less well-defined ones. It is probably most efficient for one person to go through several batches doing all the transliteration from one alphabet at a time.



2. Coding Instructions

- 1. Always keep the coding sheets in numerical order.
- 2. Use red biro (not felt-tip because it comes through on the other side of the paper).
- 3. Add X to identification no. of old format data sheets.
- 4. Put field codes in red for all no-empty fields, adding leading zeros* to single digit codes. Insert a OO field code in front of identification no. This is to assist the punch-girls who will be punching straight from those sheets.
- 5. In general cross out anything you are replacing with a code, although this is not necessary for the fields with marked boxes.
- When transliteration is required or other queries arise, code the sheet as fully as possible and mark the queried data fields with a red line down the left-hand side of the page. On the piece of paper provided with the batch, record the no. of the queried sheet and indicate briefly the type of query. For transliteration requirements, T followed by the language in brackets is a suitable indication.
- 7. Note the additional coding on PREVIOUS TITLE DATA SHEETS required for field 04, producing a new data sheet for each previous no. Keep all these sheets together.
- 8. If there are several entries for one field, try to put each entry on a new line or at least leave spaces between entries. Each entry will require its own field code.

3. Codes used on CLOSS\$ Data

Country of publication codes, and list of languages and language codes, originally derived from the Library of Congress, have been reproduced from the following document: Gorman, M. and Linford, J. E. Description of the BNB MARC record: a manual of practice. London, British National Bibliography, 1971.

The following set of instructions was prepared to assist in the coding of CLOSSS data sheets.

Special instructions for individual data fields

TITLE (in full, as it appears currently)

- Delete leading articles a)
- b) Delete non-informative sub-titling, e.g. an international journal
- c) Non-Roman alphabets require transliteration - mark field and record on query sheet.

a) Delete leading articles

03 ALTERNATIVE TITLES

- a) Delete leading articles
- Prefix each title by 03 if there are more than one. b)

PREVIOUS TITLES 04

- Delete leading articles. a)
- Prefix each title by 04 if there are more than one b)
- c) For each previous title record the following information on one of the blank data sheets provided.
 - Put 00 in front of the identification no. (i)
 - In field 01 put the 'previous' title as it now appears (ii) in field 04 of the original data sheet.
 - (iii) Transfer as much information as seems reasonable from the original data sheet, e.g. type of serial, language, etc.
 - (iv) In the space for field 20, replace 20 by 22 and write the identification no. from the original data sheet.

BEGINNING DATE

Date should be in four-digit form, i.e. 1971 not 171. a)



65

06 ENDING DATE, IF ANY.

- a) Date should be in four-digit form, i.e. 1971 not '71.
- b) If an indication has been made that there is no ending date, i.e. the serial is still in publication, delete whole field.
- 'c) Leave blank if the ending date is unknown.

07 FREQUENCY/ISSUES PER ANNUM.

a) The number of issues per annum is required except for the following alphabetic codes:-

(i)	:		~
(1)	irreaular	•	X

- (ii) every two years G
- (iii) every three years H
- (iv) other Z

08 ISSUING BODY

:3

a) Prefix each body by 08 if there is more than one.

09 TYPE OF ISSUING BODY

a) Use alphabetic code as shown in section 3 below.

10 PUBLISHER

a) Non-Roman alphabets require transliteration. Mark field and record on query sheet.

11 COUNTRY OF PUBLICATION.

a) Use 2-letter code as in the attached.

12 . TYPE OF SERIAL

a) Use numeric code as shown, in section 3 below.

13 DESCRIPTION OF SERIAL

a) Use single alphabetic code as shown in section 3 below.

14. NATURE OF CONTENTS

- a) Use alphabetic codes as shown in section 3 below.
- b) Put major catégories (X) before minor categories (V), e.g.

 AJK if the major category is articles, with news and review articles as minor categories.

15 ABSTRACTS WITH ARTICLES

a) Use numeric code as shown in section 3 below.

16 LANGUAGE OF CONTENTS

- a) Prefix each language by 16 if there is more than one.
- b) Use 3-letter language codes as in the list attached.
- c) Put B after the language code to indicate language of abstracts, and C to indicate other editions available.

17 ASSESSMENT OF SUBJECT CONTENT

- a) Prefix each subject code by 17 if there is more than one.
- b) Use 2-character codes as shown in section 3 below.
- c) Describe the content with not more than 3 codes, even if this means
 - b losing some of the information on the data sheet.
- d) A content description which cannot be accommodated by the codes in section

 3 below should be marked as a query and recorded on the sheet.



18 NUMBER OF ARTICLES

- a) Should be in numeric form.
- b) Code any number greater than 100 as 100.

19 SUBSCRIPTION PRICE

- a) Convert to £.p. using conversion factors.
- b) Delete £ sign. Put point before pence.
- c) Add .00 as pence to prices which are integral numbers of pounds.
- d) Code 'free' as 0.
- e) Code 'restricted to members' as -1.
- f) Code 'too varied to code' as -2.

20 COVERAGE BY INDEXING AND ABSTRACTING SERVICES

ra) Prefix each service by 20 if there is more than one.

LIST OF COUNTRY OF PUBLICATION CODES

This list is taken from the Library of Congress document "Country of Publication Code (including selected first level administrative subdivisions)" (Revised July 30, 1970). Certain codes are followed by another in brackets; this represents a local departure from the 3NB/MARC practice. Upper case and not lower case lettering is used for the CLOSSS file.

		•				
	af	Afghanistan	Ы	Brazil	хa	Christmas Island
	al	Alabama (US)	bc	British		(Indian Ocean)
	ak	Alaska -		Columbia	хb	Cocas Islands
	aa	Albania -	bv	Bouvet Island	ck	Colombia
	ab	Alberta (CN)	bh	British Honduras	CO	Colorado (US)
	ae	Algeria	bi	British Indian	cq	Comoro Islands
	as	American Samoa		Ocean Territory	cf	Congo (Brazzaville)
	an	Andora	b p	British Solomon Islands	•	_
	ao	Angola	bх	Brunei ²	cg	Congo (Kinshasa)
	ay	Antarctica	bu .	Bulgaria .	ct cw	Connecticut (US) Cook Islands
	ad .	Antigua	br	Burma	cr	Costa Rica
	ag	Argentina 💝	þď	Burundi	cu cu	Cuba
	az	Arizona (US) -	ca	California (US)		•
	ar	Arkansos (US)	cb	Cambodia	су	Cyprus
	ai	Armenian SS%	cm	Cameroon .	C\$	Czechoslovakia
	ac ·	Ashmore and	·cn	Canada	dm	Dahomey
		Cartier Islands	cz	Canal Zone	de 	Delaware (US)
	a‡	Australia	ср	Canton and Enderbury	,dk	Denmark
	au 🛊	Austria	95	Islands	dc	District of Columbia (US)
	aj	Azerbaijan SSR	CV	Cape Verde	₫q	Dominica
	bf	Bahamas	cj	Cayman Islands	dr	Dominican Republic
	ba	Bahrain ·	cx	Central African	ec	Ecuador
•	Ьb	Barbados		Republic	es	El Salvader
	be	Belgium	In	Central and Southern	en	England (UK)
	bw	Belorussian SSR		Line Islands	eg	Equatorial Guinea
	bm	Bermuda	ce	Ceylon		(Spanish)
	bt ·	Bhutan	cd	Chad	er	Estanian SSR Ethiopia 69
	bo	∖ Bolivia	cl	Chile	et	Ethiopia 00
	hs	Botswana	· cc	China, Mainland	fa	Faeroe Islands
	LO	UUISWUIM				

China, Republic of

fk

Falkland Islands



Botswana

ch

						l l
	fj	Fiji 7	'0 id	Idaho (US)	lh	Liechtenstein
	fi	Finland	il	Illinóis (US)	li	Lithuanian SSR
	fl	Florida (US)	ii	India	la	Louisiana (US)
	fr	France	in	Indiana (US)	lυ,	Luxembourg
	fg `	French Guinea	io	Indonesia	mh.	Macao /
	fp	French Polynesia	ia	lowa (US)	me	Maine
	fs	French Southern and Antarctic Islands	ir	Iran		
	.	·	iq	Iraq	mg	Malagasy Republic
	fţ	French Territory of Afars and Issas	· iy ·	Iraq-Saudi	mw	Malawi / .
	go	Gabon		Arabia Neutral	my	Malaysia
	gm ´	Gambia	ie	Ireland	xc .	Maldive Islands
	gz.	Gaza Strip	is		ml	Mali
	ga	Georgia	iw	Israel	mm	Malta
	gs ,	Georgian SSR	1₩	Israel-Jordan Demilitarized Zones	mb	Manitoba (CN)
	gg .	Germany (pre 1945)	iu	Israel – Syria	mq	Martinique
		Germany, East	•	Demilitarized Zones	md	Maryland (US)
_	ge ·	Germany, West	it	Italy	ma	Massachusetts (US)
,	gw gh*	Ghana	iv	Ivory Coast	mu c	Maurifania
	• •	Gibraltar	jm	` Jamaica	mf	Mauritius
	·gi	Gilbert & Ellice	in	Jan Mayen	mx	Mexico
	gn	Islands	ja '	Japan	mi ,	Michigan (US)
	gr	Greece	ji	Johnston Atoll	xf	Midway Islands
	gl	Greenland	jo	Jordan	mn	Minnesota (US)
	gd	Grenada	ks	Kansas (U\$)	ms	Mississippi (US)
	g p	Guadeloupe	kz	Kazakh SSR	mo	Missouri (US)
	gu	Guam	ky	Kentucky \	mv	Moldavian SSR
	gt	Guatemala	ke	Kenya	mc	Monaco
	gv	Guinea		\	mp	Mongolia
	gy	Guyana	kg kn	Kirghiz SSR	mt	Montana (US)
	ht	Haiti		Korea, North	mį	Montserrat
	hi .	Hawaii	ko	Korea, South	mr	Morocco
	hm	Heard and	ku	Kuwait	mz	Mozambique
	11111	McDonald Islands	ls	Laos	mk	Muscat and Oman
	ho	Honduras	lv	Latvian SSR	nυ	Nauru
	hk.	Hong Kong	le	Lebanon	nb /	Nebraska
	hu	Hungary	lo	Lesotho	np	Nepal
o"	ic	Iceland 71	lb , /	Liberia	ne	Netherlands -
ĺ		•	ly /	Libya	\	
					١ !	

na	Netherlands P	72	ph	Philippines ·	sd	South Dakota (US)
nv	Antilles Nevada (US)		рс	Pitcairn Islands	s×	South-West Africa
nk	New Brunswick (CN?))·	pl	Poland	rh	Southern Rhodesia
ni	New Caledonia		po	Portugal	ys	Southern Yemen
` nh	New Hampshire (US)		pg	Portuguese Guinea	sp	Spain '
nn	New Hebrides		pt	Portuguese Timor	SS	Spanish Sahara
nį	New Jersey (US)		pi	Prince Edward Island (Canada)	sh	Spanish Territories in Northern Morocco
nm	New Mexico (U\$)		pr	Puerto Rico	х р	Spratly Island
ny ·	New York (US)		qa	Qatar	sj	Sudan
nz	New Zeal and		qu	Quebec (CN)	sr	Surinam
nf	Newfoundland (CN)		re	Reunion	sb	Svalbard
nq	Nicaragua		ri	Rhode Island (US)		Swan Islands
ng	Niger '		rm	Rumania	SV	Swaziland
nr	Nigeria	•	ru	Russian SFSR	sq	Sweden
×h	Niue		rw	Rwanda	sw	Switzerland
xx	No place		ry	Ryukyu Islands	sz.	
nx	Norfolk Island		'7	Southern	sy	Syria Tadzhik SSR
nc	North Carolina (US)		хi	Saint Christopher-		Tanzania
nd	North Dakota (US)			Nevis-Anguilla	.tz	
ni	Northern Ireland (UK)		×	Saint Helena	tn M	Tennessee (US) Texas (US)
	Ntaraha		xk	Saint Lucia	tx 	
nt	Northwest Territories		хl	Saint Pierre and Miquelon	th	Thailand
no	Norway		xm	Saint Vincent	tg tl	Togo Tokelau Islands
ns	Nova Scotia (CN)		^ '''			
oh	Ohio (US)		sm	San Marino	to	Tongo
ok	Oklahoma (US)		sf	Sao Tomé e Principé	tr	Trinidad and Tobago
on	Ontario (CN)		sn	Saskatchewan (CN)	ts	Trucial States
or	Oregon (US)		SU	Saudi Arabia	††	Trust Territory of the
pk	Pakistan		st	Scotland (UK)		Pacific Islands
pn'	Panama		sg		ti	Tunísia
pp	Papua and New		se		tu	Turkey
	Guinea,Territory of		sl ala	6:11	tk	Turkmen SSR •
n.E	Paracel Islands		sk ••		tc	Turks and Caicos.
pf m.			si ,	Singapore	ug	Uganda
рy	Paraguay Pennsylvania (US)	•	SO	Somalia	un	Ukrainian SSR
pa		. ,	sa		ua	United Arab Republic
pe	Peru	:	SC	South Carolina (US)		

ERIC Full Text Provided by ERIC

73

uk United Kingdom

United Kingdom Misc. Islands

us United States

uc United States Misc.
Caribbean Islands

up United States Misc.

Pacific Islands

uv Upper Volta

uy Uruguay

ur "USSR

ut Utah: (US)

uz Uzbek SSR

vp Various places

vc Vatican City

ve Yenezuela

vt Vermont (US)

vn Vietnam, North

vs Vietnam, South

vb Virgin Islands (British)

vi Virgin Islands (US)

va Virginia (US)

wk Wake Island .

wl Wales (UK)

wf Wallis and Futuna

wa. ' Washington (U5).

wb West Berlin

wv West Virginita (US)

ws Western Samoa

wi Wiscoming (US)

wy Wyoming (US)

ye Yemen,

yu Yugoslavia

yk Yukon (CN)

za Zambia

75 LIST OF LANGUAGES AND LANGUAGE CODES

This list is taken from the Library of Congress document 'Revised list of languages and language codes recommended by the Working Group on Bibliographic Codes' (June 9, 1970). If a language is not given in this list or if the language is not known the code 'und' (undetermined) is used.

		•			
Acholi	ach	Bengali	ben	Cushitic(Other)cus	
Afrikaans	afr	Berber Group	ber	Czech cze	
Afro-Asiatic	•	Bihari	bih	Dakota dak	•
(Other)	afa	Blackfoot	bla	Danish dan	
Akkadtan	akk	Breton	bre	Delaware del	
Albanian	alb	Bulgarian	bul)	
Aleut	ale .	Burmese	bur	Dinka	din
Algonquin	alg	Caddo	cad	Dravidian (Other)	dra
Amharic	amh	Cambodian	cam	Duala	dua
Anglo-Saxon	ang .	Carib	car	Dutch	dut
Apache	apa	Catalan	cat	Efik	efi
Arabic	ara	Caucasian		Egy pti an	egy
Aramaic	arc	(Other)	cau	Elamite	elx
Arapahoe	arp	Celtic	cel	English	eng
Araucanian	arn	Central	•	English, middle	
Arawak ·	arw -	American Indi (Other)	an cai	(approx.1100-1400)	enm
Armenian	arm	Chechen	che `	Eskimo	esk
Assamese	asm	Cherokee	chr '	Esperanto	esp
Avar	ava	Cheyenne	chy	Estonian	est
Avesta	ave	Chibcha	chb .	Ethiopia -	eth
Aymara	aym	Chinese	-Le	Ewe	ewe
Azerbaijani	aze	Chinook	chn	Fang	fan
Baluchi	bal	Choctaw	cho	Faroese	far
Baltic (Other)	bat	Church Slavic		Finnish	fin
Bambara .	bam	Chuvash	chv	Finno-Ugrian (Other)	fiu
Bashkir	bak	Coptic	cop	Flemish	fle
Basque	baq	Cornish	cor	Fon	fon
Beja	bej	Cree	Cre		
Belorussian	bel	Creoles and	CI U	French, middle	. fre
, Bemba	bem .	Pidgins	Crp	(approx.1400-1600)	fm
, -6 11100	D € M	Croatian	76 cro		



		, ,			_	
	French, old.		Interlingua	int	Lolo	lol
	(approx.842-1400)	fro	Iranian (Othe	r) ira	Luba	lub
	Frisian	fri	Irish	iri	Luganda	lug
	Ga	gaca	Iroquois	tro 🗀	Luiseno	· lui
	Gaelic	gae'	Italian	ita	Macedonian	mac
	Galla	gal	Japanese (use		Malagasy	mla
	Georgian	geO	related Japane languages and	ese	, Malay .	may
	German	ger	dialects)	jap	Malayalam	mai
		•	Javanese	jav	Malayo-	
	German, Middle		Kachin	kac	Polynesian (Other)	
	High (approx. 1050-1350)	gmħ	Kamba	kam	Mandingo	man map
	German, Old	giiri	Kannada	kan	Manobo	mno
	High (approx.		Kanuri	. 1	Maori	wao
	•	goh	Karakal päk	kau	Marathi	mar
	Germanic (Other)	gem ´	Karakai pak Karen	ka a kair	Masai	mas
•		gon ·	`Kashmiri	kas kas	Mayan	mýn
	- 4.0	got .	Kazakh	kaz	Mende	men
	Greek,	30.	Kikuyu	kik	Miscellaneous	
		grc	Kinyarwanda	kin	Moldavian	mis
	Greek,		Kirghiz	kir	Mongol	mol
		gre	Kongo	kon	Mossi	mon
		gua	Korean (use	, ,	Multilingual	mos
	·	gu i	for related		Muskogee	mul
	Hausa	hau	Korean lang- uages and		Navaho	mus
		haw	dialects)	kor	Nepali	nav
		heb	Kpelle	kpe	Newari	nep
		her	Kru	kro		new
	x.	hin	Kurdish .	kur	Niger-Congo (Other)	nic
	J	hun	Kurukh	kru	North American	١,
	•	hup	Ladino	lad	Indian (Other)	nai
		ice ,	Lahnda	'lah	Norwegian	nor
		ilo	Lamba	lam	Nubian	nub
		inc	Laeffan	lao	; Nyamwezi	nym
	Indo-European (Other)	ine	Lapp	lap	Nyanja _I	m ya
		Ind	Letin	lat	Nyoro	'Ryo
	TRACERO GII		Latvian	lav -	Ojibwa '	
		78	Lithuanian	lit	Oriya	
-						

ERIC
Full Text Provided by ERIC

\					
Ostige ,	osa	Sino-Tibetan	۴.	Umbu <i>n</i> du	umb
Ossetic .	oss	(Other)	sit	Undetermined	und
Otomi	oto	Slavic (Other)	sla	Urdu	urd
Pahari	pah	Slovak	slo .	Uzbek	uzb
Pahlavi	pal	Slovene •	slv	Vietnamese	vie
Pali	pli	Somali	-som	Votish	
Panjabi	pan	Songhai	son	Walamo	vot
Papuan-Australian (Other)	paa	South American Indian (Other)	sai ,	Washo	wa! was
Persian, Modern	'per	Spanish	spa	Welşh	wel
Persian, Old (approx.	•	Sub-Saharan		. Wendic	wen
600 B.C400 B.C.)	peo	African (Other)	ssa	Wolof	wol
Polish	pol	Sukuma	suk .	Xhosa	xho
Portuguese	por	Sumerian	SUX	Yao ,	
Próvencal	·	Siisu	SUS	' Yiddish	yao
Pushto	pro.	Swahili	swa		yi d
Quechua	pus	. Swedish	swe	Yoruba Ż	yor
	que	* Syriac	syr	Zapotec	zap
Rajasthani	raj	Tagalog	tag	Zenaga	zen
Romance (Other)	roa	Tajik	taj 🍦	Zulu	zul
Romansh ,	roh	Tamil	tam	Zuni	zun
Romany	rom	Tatar	tar		
Rumanian ,	rum	Teʻlugu	tel		
Rundi	run	Temne	tem	•	
Russian	rus	Tereno	ter		
Samaritan ·	sam	Thai	tha		
Sandawe	saḍ	Tibetan	tib .	•	
Sango	sag	Tigre	•		
Sanskrit	san	-	tig .:		•
Selkup	sel	Tigrinya	tir . •		
Semitic (Other)	sem	Tsimshian Tswana 5	tsi		
Serbian	sér	1011 4114	tsw		
Serer	Srr	Turkish	tur		
Shan	shn	Turkmen	tuk	•	
Shona	sho	Turko-Tataric (Other)	tut		
Sidamo	sid	Twi	twi		
Sindhi	snd	Uigur	uig "	79 /	
Ci-halas		3 =	- J		

Ukranian

snh

' ukr

ERIC

Singhalese

SUBJECT CONTENT CODES

The first character of the 2-character codes indicates the general subject field, second character distinguishes specific sub-areas. At as the second character means general or substantial coverage of the subject field.

. 1			,
SUBJECT FLELD		CODE	SUB-AREAS
	1st. char.	2nd. char.	·
		••••••	·
Social and behavioural science	A	′ A	General, or covering several subject fields and area studies.
Anthropology	В	A	General
* * *		В	Cultural
		c	Economic
		D	Political
•		E	Social
		F ,	Applied
سر.		G	Ethnography ~
,		H ^	· Ethnology
Criminology	С	A	General
		В	Relationship to other social sciences
. •		Ċ,	Penology
Economics	D	Α .	General
	•	B	' Econometrics
		C .	History of economic thought
		D .	Economic development
		E *	Agricultural economics
		F '	Industrial organisations
		G	International economics
		Н	Labour economics
•		1 ' '	Money and banking, Accountancy
	1	J	Public finance
· •		κ -	Marketing (Advertising)
4	٠,	L .	Transport

SUBJECT FIELD	lst. char.	CODE 2nd. char.	SUB-AREAS ,
Education	E	A	General
		В .	Pedagogy
		С	Philosophy of education
-		D	Methods and techniques
•		Ε.	Curriculum development
		F	Educational training
Environmental	F	A	General
planning.		В .	Town and country planning
• •		C	Ecology
Ergonomics	G	A	General
Futurology ,	Н	A ,	General
Geography	1	A	General
•	•	В	Cultural
•	S.	С	Economic -
	,	. D	Political
	^ **	E	· Social a
History	J	A ,	General (social and economic only)
Linguistics ° ·	K	À	General (and philology)
		В	Applied
,		С	Social
		D	Semantics
		E	Semiology
Management and	L	A	General
administration.		В	Management techniques
		С	Personnel
		D	O & M .
•		E	Systems analysis c ~~

82

	<i>` O ~</i> ,			•
	SUBJECT FIELD	CO Tst. char.	DE 2nd. char.	SUB-AREAS
	Political Science	M .	A	General
			В	Public administration
	•	•	С	Public Law
		•	D.	International relations and peace research
		•	E	Comparative politics
	•		F	Political theory
	•		G .	The study of policy making
			Н	Political behaviour
	Psychology	Ν	A	G ∉ neral
		•	В	Clinical counselling
			C .	Educational
			D	Experimental
			E	Personality
			F	Social
			G	Industrial ·
			Н	Applied
		-	i	Social psychiatry
,	Social policy and	P	Α.,	General
	social administration.		В	Social work
(·			C .	Social-problem-orientated studies_(e.g. poverty).
	.•		D.	Professional training for social workers
			E	Social medicine
	•	*	F .	Leisure
	Sociology	á.	Α	General
	•		В ,	Economic
	•	,	С	Organisational
v	*		D	Political _s
			E	Rural
	,		F	Urban
	ŕ		G ·	Sociology of knowledge
			Н	" law
	83		i	" religion
			· · · · · · · · · · · · · · · · · · ·	والمرابع والم

APPENDIX J.

DATA VETTING



The data vet procedure consists of two parts. The first section analyses the data read in on the punched cards for a complete CLOSSS record. Field codes are checked to be numeric and in range (01 to 22), old format field codes are converted to their new format equivalents, and all fields are sorted into ascending sequence of their new format field codes. Fields for which there should only be unique data are checked to ensure that duplicate fields do not exist, and each record is checked to ensure that an 01 (title) field is present. The last appearance of a field code or set of field codes is taken to be the field code and data for the record, and any previous data with the same field code is replaced. If a field code has no data, i.e. is immediately followed by an end of field or ends of record mark, then the field is deleted from the record.

An error message is printed and the record is ignored if any particular field code is found to be non-numeric, or is out of range; or if any particular data element is longer than 250 characters. The punched cards forming the record are then printed out in 80 character blocks.

Messages are printed out to indicate the analysis undertaken. Thus, a message is printed when old format field codes have been converted to their new format equivalents, when a duplicate field exists and the field should be unique, when the 01 (title) field is not present, and when fields have been replaced or deleted. Because of the nature of the analysis procedure, the last message for a particular field code should be taken as the relevant state of the particular field in the record.

The second part of the data vet procedure processes the remaining data in the input record in ascending field code order. The data is retrieved a field at a time, formed up into an output record to be written to the magnetic tape (carried forward) file, and checked, i.e. vetted or translated, and printed to form a hard copy for proofreading. Uncoded fields are vetted to ensure that they contain only valid characters, i.e. numeric or alphanumeric, and are of the correct length or valid length

OTHER CODES

· (i) Pilot version ('old' data).
DISISS - SERIALS DATA RECORDING SHEET

PLEASE NOT	<u>TE</u>	(1) Wh	en workin talogue o	g in the f	ield collection where avail	et data whe	re possible	from ins	pection of co	pies and	the
		(2) Ch	À.	om publish		• .	1 be done 1	later by t	he_editors,	special1	y for
1	,	(3) Do	not spen	d more tha Try and co	n 5 - 10 mi	nutes on a	ny problem marked (*)	, Rechec	king will be	done lat	er by
NAME OF CO	LLECTO	OR .		•	. ,)		 		
LIBRARY WE		•		,	,	<u>-</u>	*, •				
VOLUME (OR (13), (14)	13SUE . (15)	(S)) OF	ITEM FRO (17), (1	WHICH DA 8) and (19	TA RECORDED	OON THIS.S	HEET REFERS	PARTICU E SPECIFI	LARLY QUESTIO	NS: (10), (12),
VOLUME	•	•	\$	ISSUES (Where data	does not a	pply to who	ole volume) , - DAT	E	
DATA ELEME	NTS)	•	, THE IT	EMS (*) SHO	ULO BE THE	MINIMUM RE	CORDED	· · · · · · · · · · · · · · · · · · ·		
*(1) TITL			s it rrently)	•				, , , , , , , , , , , , , , , , , , ,	`v ^		,
(2) ALTE	RNATIV	E TITLE	(S)		•			•			ه `
(3) FORM	ER TIT	LE(S)		,	1.			•		• ,	
DIFF		NGLISH 1		· ·	1			j	•		
(5) PUBL	ISHER				,			•	•	**	
(6) PUBL	ICATIO	N SPONS	OR .		•				•,	,	
	(1) (11) (111) (11) (1v) (v)	: (1) Governm	society + (ii)	or profess	sional body	A D	(vi) (vii) (viii) (ix) (x)	: (11) + : (1) + Private 1		ABH	D

*(8) ENDIÑG DATE, IF ANY

(9)	.: COUNTRY OF PUBLICATION	-		
*(10)	NUMBER OF ISSUES PER ANNUM	1		• • • • • • • • • • • • • • • • • • • •
*(11)	TYPE OF SERIAL		Periodical Monographic series	· [2]
*(12)	TYPE OF MATERIAL		Journal Abstracts Index to research/these Yearbook Indexes Contents list Book review Bibliography Statistics Gothers Index to research/these Yearbook Conference proceedings Legal (legislation, repaired articles) Cases and case notes Accessions list Others Q Monographic Series	HINK
*(13)	NATURE OF CONTENTS Indicate three main areas by a cross. Tick for minor features		Articles Abstracts Indexes Bibliographies Contents lists Book reviews and new publications (Not advertisement) Conference proceed Cases and case not Accessions lists News articles Review articles Others	lings G
*(14)	LANGUAGE(S) OF CONTENTS	•		
(15)	SUBSCRIPTION PRICE (1969) (Please indicate where alternative data is used)			•
(16)	COVERAGE BY INDEXING AND ABSTRACTING SERVICES (Where this is listed within the item)			/,
*(17)	ABSTRACTS WITH ARTICLES All main articles Some 2	<u>-</u>	*(18) NUMBER OF ARTICLES in 1969 (Listed main article in index/list of	contents)
*(19)	ASSESSMENT OF SUBJECT CONTENT Take as guidance the prepared list of subject headings in the Manual and use or modify accordingly			

86.

DISISS - SERIALS DATA RECORDING SHEET

(ii) Final version ('new' data).

PLEASE NOTE	(1) ,	When working and the cata	in the fiel	d coile	ect data where p were available	ossible f	rom inspec	tion of capi	es
	(2)	Checking from	om published for items not	bibliop marked	raphies will be l (*)	done at	the editir	g stage,	٠
. *	(3)	Do not spend later at the marked (*)	d more than 5 e éditing sta	- 10. n go. T	inutès on any p 'ry and collect	roblem. at least	Recheckir those data	g will be do	ne
•						•		•	
NA'Æ OF COLLECTOR	•			•	LIBRARY WHERE DATA COLLECTE		,	* , *	
VOLUME (OR IS	SSUE(S 13), ()) OF ITEM FRO	M WHICH DATA 6), (18), (1	RECORD 9) * and	ED ON THIS SHEE (20)), WHERE THE	T REFERS DATA IS	(PARTICULA VOLUME/ISS	RLY QUESTIONS UE SPECIFIC	 }:
VOLUME.		•			a does not whole volume)	DATE		,	:
		•	, '	,			•		
				, e	•	`			
DATA ELEMENTS	3		THE ITEMS	(*) SHO	ULD BE THE MINI	MUM RECORI	DED		
* (1) TITLE	(In f	ull, as it ap	pears curren	tly)	.	*		*	_
`						,v	•		
* (2) TITLE	IN EN	GLISH IF DIFF	ERENT FROM (1)	•		•		
					•		٠.		
				•	· .				
(3) ALTERN	ATIVE	TITLE(S)			w ` _		*	•	
						•	•	•	
(4) PREV 10	US TIT	TLE(S)			*				
	,			•	•	•	•	` '	. 4
					`	•			
* (5) BEGINN	ing da	TE	•	•	* (6) ENDING D	ATE, IF A	NY		•
+ (7) FREQUE	NCY/IS	SUES PER ANNU	JM (Indicate	year to	iken) as			•	• •
(8) ISSUING	BODY						 		



	(9)	TYPE OF ISS	UING BO	DY				
	Society	tion(s), , Prof. Body ship instns) er			Local) institution ressure group	CDE	International Organization (i.e., UN, EEC, NATO) Commerical/business enterprise Private/individual	F GH
	·	OTHERS (Des	eri pti	on/type) []	3	/	•	
	(10)	PUBLISHER (Name)		'\			, '
,	(11)	COUNTRY OF	PUBL.IC	TION	See li	st		,
	* (12)	TYPE OF SER	IAI.			- 		
		×		,	Periodical	<u>.</u>	Monographic series 2	· ,
	* (13)	DESCRIPTION	OF SE	RIAL (Tick on	e category)		. , , , , , , , , , , , , , , , , , , ,	
	Periodi Abstrac Indexes Content Book re	s list	AB C P E I Cate	Yearbook	°, iy search∕theses	FGHH	Fixed period report Conference proceedings Legal/legislation, report articles Cases and case notes Accessions list Monographic series	P P
	* (14)	NATURE OF C	CONTENT		ajor categori	es by	cross and minor features by tick)	
	Article Abstrac Indexes Biblios	cts	ABB CDD		ws and new ons (not	e	Cases and case notes Accessions lists News articles Review articles Statistics	THINK
	* (15)	ARSTRACTS V	TTH AR	TICLES (Tick	in boxes)			
	(10)	All main a			Some	2	None 3	•
	* (16)	LANGUAGE(S)	of co	NTENTS	A	See	list	
	* (17)	ASSESSMENT	OF SUB	JECT CONTENT	(Take as guid	lance	the prepared list of subject headings)0
	•	.•	•			See	list	
	. # (10)	NIMBER OF A	PTICIF	S IN 1060		(19)	SIRSCRIPTION PRICE (1969)	

(20) COVERAGE BY INDEXING AND ABSTRACTING SERVICES (Where this is listed within the item)

(Listed main articles in index/list of contents)

(Please indicate where alternative data is used)

APPENDIX IX

PUNCHING INSTRUCTIONS FOR CLOSSS

General Instructions

Each record consists of a number of fields in series. Commence each record on a new card and continue punching cards as necessary.

Each field consists of a 2 digit field code in the range 00 to 22. Punch both digits. End each field with the end of field marker (#).

Punch field code 00 with the serial number and an X if present.

Then punch only fields with red field codes followed by what is written regardless of colour unless it has been crossed out.

End each record with the end of record marker.

Supplementary Instructions

- 1. Apostrophe's in French titles and publishers should not be ignored and closed up, but punched as written.
- 2. Hyphens in hyphenated words should be punched as hyphens and not spaces.

RHODES-LIVINGSTONE

punch hyphen.

but '

COOPERATIVE

no hyphen and close up.

Punctuation vital to sense, i.e. where used to separate sub-titles, names of institutions, place names, etc., in journal titles and publishers, e.g.:;, should be punched as commas.

APPENDIX J.

DATA VETTING

0

The data vet procedure consists of two parts. The first section analyses the data read in on the punched cards for a complete CLOSSS record. Field codes are checked to be numeric and in range (01 to 22), old format field codes are converted to their new format equivalents, and all fields are sorted into ascending sequence of their new format field codes. Fields for which there should only be unique data are checked to ensure that duplicate fields do not exist, and each record is checked to ensure that an 01 (title) field is present. The last appearance of a field code or set of field codes is taken to be the field code and data for the record, and any previous data with the same field code is replaced. If a field code has no data, i.e. is immediately followed by an end of field or ends of record mark, then the field is deleted from the record.

An error message is printed and the record is ignored if any particular field code is found to be non-numeric, or is out of range; or if any particular data element is longer than 250 characters. The punched cards forming the record are then printed out in 80 character blocks.

Messages are printed out to indicate the analysis undertaken. Thus, a message is printed when old format field codes have been converted to their new format equivalents, when a duplicate field exists and the field should be unique, when the 01 (title) field is not present, and when fields have been replaced or deleted. Because of the nature of the analysis procedure, the last message for a particular field code should be taken as the relevant state of the particular field in the record.

The second part of the data vet procedure processes the remaining data in the input record in ascending field code order. The data is retrieved a field at a time, formed up into an output record to be written to the magnetic tape (carried forward) file, and checked, i.e. vetted or translated, and printed to form a hard copy for proofreading. Uncoded fields are vetted to ensure that they contain only valid characters, i.e. numeric or alphanumeric, and are of the correct length or valid length

90

range for variable length fields. Various comments are printed beside variable length numeric fields, e.g. "issues per year" for field 07, and "articles" for field 18 and for field 19 the price is printed in 'pounds new pence' format, in order to make clearer the various meanings of these fields. Coded fields are translated against a translation table for the field code, and both the translated data and the code(s) are printed. Thus, at the proofreading stage it will be possible to check the data against the actual boxes ticked or subjects, languages, countries given on the CLOSSS data collection sheets, rather than the data as coded. This will help to eliminate any coding errors.

Invalid data is flagged and printed as invalid, and the error character in the magnetic tape record is set. Various check messages are printed, and occasionally certain coded and uncoded fields have their data formats and/or contents altered.°

Details of the checks carried out on each individual field, the check messages printed and the format alterations carried out, are given in the following table.

Examples of the magnetic tape record format, the hard copy line printer output for proofreading, etc. are given in Appendix K.

	•		92
	Field Code	Description of Field	Description of contents of field, and the data vet or translation required.
	•	CLOSSS Number (Record number)	Five digit number in range 00000 to 09999. (For old format data, this number is followed by an X and all subsequent field codes are converted to their new format equivalents, see Table 1.)
7	01	Title	One field only must be present. Field may contain up to 250 valid characters. A check message is printed if the data is of 3 or less characters. (N.B. The valid character set contains the following characters space., (-1) letters A to Z and numbers 0 to 9.)
	02	Title in English if different from .	Only one field is allowed. Field is vetted as for field 01.
	03	Alternative Title(s)	Field may be duplicated. Each field is vetted as for field 01.
	, 04	Previous Title(s)	Field may be duplicated. Each field is vetted as for field 01.
	05	Beginning Datę	Only one field is allowed. Four digit date. Must be before 1973. A check message is printed if the date is before 1800.
		•	
	06	Ending Date	Only one field is allowed. Either a four digit date which must, be after the date given in field 05. Date is then checked as for field 05.
	,	,	Or a single character code. A space is changed to a - and the data is translated against the following table:-
			X CONTINUING
	•	•	- DATE UNCERTAIN
	07 .	Frequency of publication (issues per year)	Only one field is allowed. Either a number of up to three digits, (if a single digit may not be 0) printed with the message "ISSUES PER YEAR". Or a single character code translated against the following table:- X ISSUED IRREGULARLY
	•	93	11 1001150 51/501/ 0 1/51/00

ERIC

Field Code	Description of Field	Description of contents of field, and the data vet or translation required.
08	Issuing Body or Bodies	Field may be duplicated. Each field is vetted as for field 01.
09	Type of Issuing Body	Only one field is allowed. String of up to nine characters. Each character is translated against the translation table for the field. A particular character may only appear once in the string.
10 .	Publisher(s)	Field may be duplicated. Each field is vetted as for field 01.
11	Country or Countries of Publication	Field may be duplicated. We character code, translated against the translation table for the field. A check message is printed if the data is of the correct length but the code does not appear in the translation table.
	Type of Serial	Only one field is allowed. Single character code. If coded A, the code is changed to a 1, and a check message is printed. The data is translated against the translation table for the field.
13	Description of Serial	Only one field is allowed. Single character code. If coded 1, the code is changed to an A, and a check message is printed. The data is translated against the translation table for the field.
14	Nature of Contents	Only one field is allowed. String of up to 13 characters. Each character is translated against the translation table for the field. A particular character may only appear once in the string.
15	Abstracts with Articles	Only one field is allowed. Single character code. If coded A, B or C, the code is changed to a 1, 2 or 3 respectively, and a check message is printed. The data is translated against the translation table for the field.
16	Language(s) of Contents	Field may be duplicated. Either a three character language code; or a four character code consisting of a three character language code followed by either a B or a C. Codes of length three must appear before codes of length four. The three character language
RIC	94	code is translated against the translation table

Field Code	Description of Field	Description of contents of field, and the data vet or translation required.
16 (cont'd.)		for the field. For valid length four codes, the letters ABS. or EDN., representing the codes B or C respectively, are inserted next to the translated language. A check message is printed if the data is of a valid length but the language code does not appear in the translation table. (N.B. The three character code ITI is changed to ITA, and the translated data is printed together with a check message).
17	Assessment of Subject Content	Field may be duplicated. Two character code, translated against the translation table for the field. (N.B. If the first character of the code is an 0, then it is changed to a P and a check message is printed).
18	Number of Articles	Only one field is allowed. Number of up to 3 digits, printed with the message "ARTICLE(S)".
19	Substription Price	Only one field is allowed. Either a code, which can be either a single digit 0, or a two character code -1 or -2. These last two codes are altered to a single letter A or B respectively, and a re-coded message is printed. The data is translated against the following translation table:
	-	O FREE -1 recoded A LIMITED TO MEMBERS -2 recoded B VARIES/OTHER ETC.
		Or a number of up to five digits. A single digit number (other than O) is changed to a two digit number by preceding it with a zero. A three digit number commencing with a zero is reduced to a two digit number by ignoring the first character. The data is then printed in Pounds/Pence format.
• 20	Coverage by Indexing and Abstracting Services	Field may be duplicated. Each field is vetted as for field 01.
21 🚁	issn	Field not used at present.
22	Subsequent Title	Only one field is allowed. Five digit number, which is the CLOSSS Number of the subsequent title record. If the number is followed by an X, then the X is ignored. The data is printed.
~	• 95	with a "SEE ALSO" message.
J	+	

, s

NOTES

All fields are optional except field 01.

There is no limit to the number of times a particular duplicate field may appear, though the total data length of any record may not exceed 960 characters.

Invalid data is printed enclosed in brackets and preceded by a string of question marks.

Table 1.

Relation between 'old' and 'new' format data field codes

Old format data field code		Corresponding new format data field code.
01		01
02,	jr	03
03	•	04
0,4	' ?	02
05		10
\ 06		. 09
.07	• •	05
08 .		06
09		11
· 10	•	07
11	•	12
12	مه	13
13	•	14 ·/
14		16
15		19
16	r	20
1 <i>7</i>		· 15
18		, 18
19	•	. 17
22		22

An X after the 5 digit CLOSSS Number indicates that the data is in 'old' format.

There are no old format field codes corresponding to new format field codes of 08 and 21.

Translation tables for Box-coded data fields

Translation table for field 09.

Α		Associations
$\overline{}$	*	

- A Associations
- B Publisher
- C Government
- D Educational Inst.
- E Political Groups
- F International Org.
- G Commercial/Business
- H Private/Individual
- 1 Others

Translation table for field 12.

- l Periodical
- 2 Monographic series

Translation table for field 13.

- A Periodical Journal
- B * Abstracts
- C Indexes
- D Contents Lists
- E Book Reviews
- F Bibliography
- G Statistics
- H Index to Research
- I Yearbook
- J Fixed Period Report
- K Conference Proc.
- L Legal/Legislation
- M Cases & Case Notes
- N Accessions Lists
- P, Monographic Series
- Q Others

Α	Artic	-les

B Abstracts

C, Indexes

D Bibliographies

E Contents Lists

F Book Reviews

G Conference Proc.

H Cases & Case Notes

Accession Lists

J News Articles

K Review Articles

L Statistics

M Others

Translation table for field 15.

1 All Art. Abstracts

2 , Some Art · Abstracts

3 No Art. Abstracts

The following tables give the translation table used for fields 11, 16 and 17. It can be seen that these tables, taken from the BNB/MARC lists given in Appendix H are not complete, but are representative of codings actually used.

Translation table for field 11 - Country of publication.

UK· !	UN	ITED I	KIN (GDOM
-------	----	--------	-------	------

US UNITED STATES

FR FRANCE

GW WEST GERMANY

IT ITALY

SP SPAIN

HU HUNGARY

AT AUSTRALIA

CN-CANADA

NE NETHERLANDS

101

PO IE GR TU UR SA

11. INDIA CS **CZECHOSLOVAKIA** DK DENMARK NORWAY NO SWEDEN SW SZ **SWITZERLAND** PL **POLAND** YU YUGOSLAVIA BELGIUM BE **FINLAND** FI RUMANIA RM : AU **AUSTRIA** BU BULGARIA EAST GERMANY · GE •

GE EAST GERMANY
LU LUXEMBOURG
GG GERMANY
PO PORTUGAL
IE IRELAND
GR GREECE

U TURKEY (
IR U.S.S.R.

A SOUTH AFRICA

ZA ZAMBIA
KE KENYA

AE. ALGERIA

ET ETHIOPIA

MX . MEXICO BL BRAZIL

NZ NEW ZEALAND

PH PHILIPPINES .

JA JAPAN

AG ARGENTINÀ

UA UNITED ARAB REPUBLIC

PE PERU

LY----LIBYA

MR MCROCCO

NR NIGERIA

 $1\overline{02}$

VN VIETNAM, NORTH

VS VIETNAM, SOUTH

NP NEPAL

CE

CC MY

PΚ

SI `

BR

JM.

HK TH

IS

IQ

ŲΥ

CK

CL

VE

ΑK

HI

HO CU

SG

GT

EC

LE

TI

GH

CM AO

CH

KO

PP

10

IR

KU

JO

CEYLON

MALAYSIA

PAKISTAN

SINGAPORE

JAMAICA ,

THAILAND

URUGUAY

COLOMBIA

VENEZUELA

ISRAEL

IRAQ

CHILE

ALASKA

HAWAII .

SENEGAL

ECUADOR

LEBANON

TUNISIA

GHANA

CAMEROON

CHINA, REPUBLIC OF

PAPUA & NEW GUINEA

KOREA, SOUTH

INDONESIA

IRAN

KUWAIT

JORDAN

ANGOL/

GUATEMALA

CUBA

HONDURAS

HONG KONG

BURMA -

CHINA, MAINLAND

103

UG / · UGAŇDA

CG CONGO (KINSHASA)

PR PUERTO RICO

SL SIERRA LEONE

SJ SUDAN

VB VIRGIN ISLANDS

ES EL SALVADOR°

MM MALTA

MG MALAGASY REPUBLIC

TR TRINIDAD & TOBAGO

NA NETHERLANDS ANTILLES

PN PANAMA

Translation table for field, 16 - Language

ENG ENGLISH

FRE FRENCH

GER GERMAN

SPA SPANISH

ITA ITALIAN

HUN HUNGARIAN

DUT DUTCH

RUS RUSSIAN

CZE CZECH

POL POLISH

POR PORTUGUESE

-RUM RUMANIAN

FIN FINNISH

DAN DANISH

NOR NORWEGIAN

SWE SWEDISH

SER SERBIAN

CRO CROATIAN

GRE GREEK, MODERN

TUR TURKISH

FLE FLEMISH

BUL BULGARIAN 104

ERIC Full Text Provided by ERIC

HEB HEBREW

AFR AFRIKAANS

ARA ARABIC

JAP JAPANESE

CHI CHINESE

HIN HINDI .

SWA SWAHILI

LAT LATIN.

WELSH

VIE VIETNAMESE

AFA AFRO-ASIATIC

Translation table for field 17 - Subject content

DA ÉCONOMICS, GENERAL

DH LABOUR

DI ACCOUNTANCY, BANKING

MA POLITICAL SCIENCE

MB PUBLIC ADMINISTRATION

MD INTERNATIONAL RELATIONS

NA PSYCHOLOGY, GENERAL

NC EDUCATIONAL PSYCHOLOGY

NI SOCIAL PSYCHIATRY

PA SOCIAL POLICY & ADMIN.

PB SOCIAL WORK

PE SOCIAL MEDICINE

EA EDUCATION

IA GEOGRAPHY

AA SOCIAL SCIENCES

BA > ANTHROPOLOGY, GENERAL

FB TOWN & COUNTRY PLANNING

JA HISTORY

KA LINGUISTICS

LA MANAGEMENT

LC PERSONNER MANAGEMENT

QA SOCIOLOGY, GENERAL

RA STATISTICS

SA LAW

105.

N



TA ARCHITECTURE

VA LIBRARY SCIENCE

BG ETHNOGRAPHY

BH ETHNOLOGY

CA CRIMINOLOGY

DD ECONOMIC DEVELOPMENT

DE AGRICULTURAL ECONOMICS

DK ADVERTISING, MARKETING

DL TRANSPORT

FA ENVIRONMENTAL PLANNING

GA ERGONOMICS

IC GEOGRAPHY, ECONOMIC

QE SOCIOLOGY, RURAL .

QQ DEMOGRAPHY

UÀ ARCHAEOLOGY

BB ANTHROPOLOGY, CULTURAL

BE ANTHROPOLOGY, SOCIAL

DB ECONOMETRICS

DC ECONOMIC HISTORY

DF INDUSTRIAL ECONOMICS

DG INTERNATIONAL ECONOMICS

DJ PUBLIC FINANCE

FC ECOLOGY

HA FUTUROLOGY

IB GEOGRAPHY, CULTURAL

ID GEOGRAPHY, POLITICAL

IE GEOGRAPHY, SOCIAL

LB ADMINISTRATION

LD ORGANISATION & METHODS

LE SYSTEMS ANALYSIS

MF POLITICAL THEORY

ND EXPERIMENTAL PSYCHOLOGY

NE PERSONALITY

NG INDUSTRIAL PSYCHOLOGY .

PC SOCIAL STUDIES

PF LEISURE

QF - SOCIOLOGY, URBAN



QI	SOCIOLOGY OF RELIGION
QK	HUMAN ECOLOGY
QN	SURVEY RESEARCH
QP	MASS COMMUNICATION
SB '	INTERNATIONAL LAW
WA	PHILOSOPHY
RG	OPERATIONAL RESEARCH
MC (PUBLIC LAW
NH	APPLIED PSYCHOLOGY
NF	SOCIAL PSYCHOLOGY
NB	CLINICAL PSYCHOLOGY
CC	DENIOLOGY

APPENDIX K

SPECIMEN PRINTOUT FROM CLOSSS FILE

Figure		Description
1		Record string dump (to simplify reproduction only half the width of print-out is shown).
2.	v	Complete print-out of record in 'new' format.
3	٥	Complete print-out of record showing conversion from 'old' format to 'new' format.
4.	`	Print-out of part of alphabetical listing with certain other data fields.
	Ď	Data fields, in order from left to right, are:
		(a) running number
	•	(b) OO CLOSSS number
	•	(c) Ol title
•		(d) 13 description of serial
	•	(e) 07 frequency
		(f) 11 country of publication
ta	•	(The right hand margin has been trimmed to simplify reproduction).

Figure 1.

LETGTO = 274

00500 E 1461 ACC - SUCTALISTA ITALIAGONOS1020#06=#071#63619LIOTECA SOCIALE
IBLACTICA SOCIETATA COLLACIA DIFFETTA DA LELIO BASSOM111T#121#131#146#153#1

1600TO = 271 = DURAN FR THRELIFTIC COSMEE UAMMEROS1933#M61935#MALTISTITUT OFFTHRES EUROPI - PLITMSTIT OF STATULES FOR OPPRESSIES, OFFICE OF INFORMATION ALLEMANDES#11FA#121#0

LESSTS = 35 DORAT FO TROUBLE DO CERTAR LATING AREPICANO DE PESCOISAS EM CIENCIAS SOCIA EN RATIO A ENGLATIONAL SCIENTIFIC AND COUTURAL DROUBSATION#90F#10LOS.GOLIEZ CATIONAL SCIESTIFIC AS CULTORAL OPSANISATION#19RE#121#13A#14AF6#151#16PQR#F

LEGGT: = 164 CHZ12 FM TRULITICAL OFSTANCH ORGANIZATION AND DESPSEMON-MORSAGE PUBLICATION #152-166 G017 JURZZO 314+ ...

LETGING # 250 0.0313 FB (1316 E0 FORCATION A D SCHOOL LIFE#06##0#MAINTED STATES DEPARTMENT CATIO # MULTING ITEM STATES DEPARTMENT OF HEALTH FOR CATION AND RELEARE#1105#10

LEBST = # 311

COSTAX = 0 TATEMICATE BERAVIOURAL SCIENTISTHOAPOLITICAL RESEARCH ORGANIZATION

ORLICATIO SUIT SUITAMINAMIAARUHISZMIAENGMIZATRASONION64#20PUBLIC AFFAIRS IN

TOTEK#50CI LOSICAL ARBTRACTS=PSYCHOLOGICAL ARSTRACTS(HUMA HITIES INDEX)+

LETGTH = 170 00316 #31AMERICAM BUSINESS LAW JOURNALF351963#06x#073#08AMERICAN BUSINESS ASSOCIATIO 411 S4121#13A414AFFWMJ#153#16FNG#17SA#1815419415#

TLENGTH = 215 DOT12X RETURN THER ICAL CITY#051999#868##0712#09H#1: BUTTENHEIM PUBLISHING COF M#1#190#1903.#2-Encinefring index incorporated#RFABERS GUIDE TO PERIODICAL E

LEFGTH = 1/0

OCTIRE # 11AMEDICAL COMMETTER OF LEAPNED SOCIETIES NEWSTETTER#051949#06x#078#0

fus#1214134#144J#153#16EUG#17EA#16P#190+

LEUGTH # 169
OPETO # 16"EFICA" COMMITYEDARMERICAN COMMITY GOVERNMENT#051970#06x#0712#06A*
TY#11US#121#13'#14AFGJ#153#16EMG#17MB#1848#19415*



Printout of a sample record

13	PERIODICAL JOURNAL	(A) .
14	ARTICLES BOOK REVIEWS NEWS ARTICLES	(A) (F) (J)
16,	ENGLISH	(ENG)
17 .	SOCIOLOGY, GENERAL	(QA)
25	ALSÓ SEE 04485	*
*1	LENGTH = 173	·
*******	*********	*******************
00	04487	
01	POVERTY AND HUMAN R	ESOURCES ABSTRACTS
05	1966	,
06,	CONTINUING	(x)
. 07	4 ISSUES PER YEAR	
80	UNIVERSITY OF MICHI	GAN
₩9	· EDUCATIONAL INST.	(0)
10	SAGE PUBLICATIONS	
11	UNITED STATES	(US) , °
12	PERIODICAL	(1)
13	ABSTRACTS	(8)
14	ABSTRACTS Indexes	(B) (C)
16	ENGLISH	(ENG)
17	SOCIOLOGY, GENERAL	(QA)
18	O ARTICLES	¢ ,
19.	£ 20.00	·
	LENGTH = 153	
00	04488	*******

O1 SOCIOLOGICAL METHODS AND RESEARCH
O5 1972 110

(10) 12. ISSUES PER YEAR (A) 03 (02) HENSCH UND SEINE WELT (10) 12. ISSUES PER YEAR (A) 03 (02) HOWBDE Y SOCIEDAD (06) ASSOCIATIONS (A) 03 (02) HOWBDE Y SOCIEDAD (05) INSTITUTE OF DIRECTORS (O5) (O7) 1968 (C) 1968 (C) (O8) CONTINUING (X) (11) PERIODICAL JOURNAL (A) 09 (06) PUBLISHER (C) (A) (11) (O9) UNITED KINGDOH (UK) (O6) PUBLISHER (C) (A) (A) (A) (A) (A) (A) (A) (A) (A) (A	(10)	DIRECTOR		6	(01)	HUMAN CONTEXT	
(10) 12 ISSUES PER YEAR 03 (02) HENSCH UND SEINE WELT (10) 12 ISSUES PER YEAR 03 (02) HONDO VISSUTO DELL-UOMO (05) INSTITUTE OF DIRECTORS 05 (07) 1968 (07)	(10)	1967	•	£0	(05)		
(10) 12 ISSUES PER YEAR (106) ASSOCIATIONS (107) INSTITUTE OF DIRECTORS (108) UNITED KINGDOM (UK) (109) UNITED KINGDOM (UK) (109) UNITED KINGDOM (UK) (119) PERIODICAL JOURNAL (A) (120) PERIODICAL JOURNAL (A) (131) ARTICLES (141) PERIODICAL JOURNAL (A) (152) ARTICLES (153) ARTICLES (154) ARTICLES (154) ARTICLES (155) (A) (157) AO ART. ABSTRACTS (157) AO ART. ABSTRACTS (158) C. HOUCER PUBLISHING HOUSE (159) "AAVAGEMENT (150) "AAVAGEMENT (150) "AAVAGEMENT (150) "AAVAGEMENT (151) AC ARTICLES (152) C. HOUCER PUBLISHING HOUSE (153) C. HOUCER PUBLISHING HOUSE (154) "AAVAGEMENT (155) C. HOUCER PUBLISHING HOUSE (157) AO ARTICLES (158) C. HOUCER PUBLISHING HOUSE (159) "AAVAGEMENT (150) "AAVAGEMENT (150) "AAVAGEMENT (150) "AAVAGEMENT (151) C. HOUCER PUBLISHING HOUSE (152) C. HOUCER PUBLISHING HOUSE (153) C. HOUCER PUBLISHING HOUSE (154) ARTICLES (155) C. HOUCER PUBLISHING HOUSE (157) AO ARTICLES (158) C. HOUCER PUBLISHING HOUSE (159) "AAVAGEMENT (159) C. HOUCER PUBLISHING HOUSE (150) "AAVAGEMENT (150) "AAVAGEMENT (151) C. HOUCER PUBLISHING HOUSE (152) C. HOUCER PUBLISHING HOUSE (153) C. HOUCER PUBLISHING HOUSE (154) ARTICLES (155) C. HOUCER PUBLISHING HOUSE (157) AO ARTICLES (158) C. HOUCER PUBLISHING HOUSE (159) C. HOUCER PUBLISHING HOUSE (150) "AAVAGEMENT (151) C. HOUCER PUBLISHING HOUSE (151) C. HOUCER PUBLISHING HOUSE (152) C. HOUCER PUBLISHING HOUSE (153) C. HOUCER PUBLISHING HOUSE (154) C. HOUCER PUBLISHING HOUSE (157) C. HOUCER PUBLISHING HOUSE (158) C. HOUCER PUBLISHING HOUSE (159) C. HOUCER PUBLISHING HOUSE (150) C. HOUCER PUBLISHING HOUSE (150) C. HOUCER PUBLISHING HOUSE (151) C. HOUCER PUBLISHING HOUSE (153) C. HOUCER PUBLISHING HOUSE (154) C. HOUCER PUBLISHING HOUSE (155) C. HOUCER PUBLISHING HOUSE (158) C. HOUCER PUBLISHING HOUSE (159) C. HOUCER PUBLISHING C. HO	(80)	CONTINUING	(X)	60	(05)	UND SEINE	
(05) INSTITUTE OF DIRECTORS 05 (07) 1968 (107) INSTITUTE OF DIRECTORS 05 (07) 1968 (108) UNITED KINGDOM (UK) 06 (08) CONTINUING (KX) (11) PERIODICAL JOURNAL (A) 07 (10), 1 ISSUE PER YEAR (12) ARTICLES (A) 09 (06) PUBLISHER 7-(B) (13) ARTICLES (A) 10 (05) CHAUCER PUBLISHING HOUSE BOOK RETEWS (F) 11 (09) UNITED KINGDOM (UK) (17) ACART ABSTRACTS (3) 12 (11) PERIODICAL JOURNAL (A) (14) EAGLISH (ENG) 13 (12) PERIODICAL JOURNAL (A) (15) E. 10.00 16 (14) FREHCH (F) (TALIAN (ENG) (15) E. 10.00 16 (14) TALIAN (ENG) (15) LEHGTH # 111 (5) (19) PSYCHOLOGY, GÈNERAL (17) PSYCHOLOGY, GÈNERAL	(10)	. W		03	(05)	.>-	
(19) UNITED KINGDOM (UK) 06 (08) CONTINUING (X) (11) PERIODICAL JOURNAL (A) 07 (10) 1 ISSUE PER YEAR (12) PERIODICAL JOURNAL (A) 09 (06) PUBLISHER 7 (B) (13) ARTICLES (A) 10 (05) CHAUCER PUBLISHING HOUSE YEBS ARTICLES (B) 11 (09) UNITED KINGDON (UK) (17) NO ART, ABSTRACTS (B) 12 (11) PERIODICAL JOURNAL (A) (18) NAHAGEMENT (ENE) 13 (12) PERIODICAL JOURNAL (A) (19) "ANAGEMENT (LA) 14 (13) ARTICLES (A) (18) TO ARTICLES (A) 16 (14) FREHCH (ENE) (18) TO ARTICLES (A) 16 (14) FREHCH (TA) LEHGTH # 111 16 (14) SPAHISH (SPA) 17 (19) PSYCHOLOGY, GÈNERAL 19 (15) E 5.25	(90)	ASSOCIATIONS	(A)	03	(05)	VISSUTO	0 % 0 0
(13) PERIODICAL (1) 07 (10) 1 ISSUE PER YEAR (12) PERIODICAL JOURNAL (13) 09 (06) PUBLISHER % (18) 09 (06) PUBLISHING HOUSE BOOK REVIEWS (19) 11 (09) UNITED KINGDON (UK (17) NO ART. ABSTRACTS (18) 12 (11) PERIODICAL JOURNAL (19) "AWAGEMENT (ENG) 13 (12) PERIODICAL JOURNAL (19) (19) "AWAGEMENT (19) (14) PERIODICAL JOURNAL (19) (15) E 10.00 (16) (14) FREIICH (17) (174) (18) (19) (19) (19) (19) (19) (19) (19) (19	(50)	1 0		5 0,	(20)	1968	
(11) PERIODICAL JOURNAL (A) 07 (10) 1 ISSUE PER YEAR (12) PERIODICAL JOURNAL (A) 09 (06) PUBLISHER 7 (B) (13) ARTICLES (J) 11 (09) UNITED KINGDOM (UK (TEMS ARTICLES (J) 11 (09) UNITED KINGDOM (UK (TEMS ARTICLES (J) 12 (11) PERIODICAL JOURNAL (A) (14) ENGLISH (ENG) (15) PERIODICAL JOURNAL (A) (15) TC ARTICLES (A) (15) ENGLISH (ENG) (15) ENGLISH (ENG) (15) ENGLISH (ENG) (15) ENGLISH (ENG) (15) ENGLISH (SPA) (15) ARTICLES (A) (TA) ARTICLES (A) (TA) (TA) ARTICLES (A) (TA) (TA) ARTICLES (A) (TA) (TA) ARTICLES (A) (TA) (TA) (TA) (TA) (TA) (TA) (TA)	(60)	. UNITED KINGDOM	(08)	90	(80)	CONTINUING	æ
(12) PERIODICAL JOURNAL (A) U9 (06) PUBLISHER 7 (B) (13) ARTICLES BOOK REVIEWS (F) 11 (09) UNITED KINGDOM (UK (17) AO ART. ABSTRACTS (3) 12 (11) PERIODICAL JOURNAL (A) (14) EAGLISH (ENG) 13 (12) PERIODICAL JOURNAL (A) (15) "AAVAGEMENT (LA) 14 (13) ARTICLES (A) (16) "AAVAGEMENT (LA) 14 (14) FREHCH (ENG) (17) ENGIN = 111 LENGTH = 111 LENGTH = 111 A (14) SPAHISH (SPA) (17) ARTICLES (3) (18) FREHCH (GRG) (GENERAL (SPA) (19) PSYCHOLOGY, GÈNERAL (SPA)	(11)	PERIODICAL	(2)	20	(10)	9 8.3 8.3	
### ARTICLES ### BOOK REVIEWS (F) ### ARTICLES ### ARTICLES ### ARTICLES ### ARTICLES ### ARTICLES ### ARTICLES ### CENG	(12)		(*)	090	(90)		(B)
BCOK REVIEWS (F) 11 (09) UNITED KINGDON (UK) NO ART. ABSTRACTS (3) 12 (11) PERIODICAL JOURNAL (1) EAGLISH (ENG) 14 (12) PERIODICAL JOURNAL (A) "ANAGEMENT (LA) 14 (13) ARTICLES (A) 76 ARTICLES 16 (14) FRENCH (FRE) E 10.00 16 (14) FRENCH (FRE) LENGTH = 111 16 (14) FRENCH (FRE) LENGTH = 111 16 (14) FRENCHOLOGY, GENERAL (SPA) ************************************	(13)	. 8213	(4)	40	(50)	PUBLISHING	HOUSE
hO ART. ABSTRACTS (3) 12 (11) PERIODICAL JOURNAL (A) EAGLISH (ENG) 14 (12) PERIODICAL JOURNAL (A) "ANAGEMENT (LA) 14 (13) ARTICLES (A) £ 10.00 16 (14) FREHCH (FRE) LEHGTH # 111 16 (14) FREHCH (FRE) LEHGTH # 111 16 (14) SPAHISH (SPA) ************************************		REVIEW ARTICL	£3	11	(60)		(UK)
ENGLISH "AUAGEMENT (LA) 14 (13) ARTICLES (A) 76 ARTICLES (A) 76 ARTICLES (A) 76 ARTICLES (A) FRENCH (FRE) LENGTH # 111 LE	(17)		33	12	(11)	PERIODICAL	£
### ### ### ### ### ### ### ### ### ##	(41)	,	(ENG)	13			3
76 ARTICLES £ 10,00 £ 10,00 LENGTH = 111	(19)	"AWAGEMENT	. (FA)	14	(13)	ARTICLES	((((((((((
(15) £ 10.00 LENGTH # 111 LENGTH # 111 LENGTH # 111 (14) FREHCH (17) SPANISH (SPA) 17 (19) PSYCHOLOGY, GENERAL 19 (15) £ 5.25	(18)	76 ARTICLES	5 _,	16	(44)		(ENG)
LENGTH # 111 (14) ITALIAN (SPA) (SPA	(15)	£ 10,00	·	16	(11)	•	(FRE)
**************************************				. 16	(41)		(ITA)
17 (19) PSYCHOLOGY, GENERAL 19 (15) £ 5.25	* * * * * * *		******	3	3/		(SPA)
બ				17	165	_	CNA
		`		19	(15)		

LENGTH = 199

Figure 4.

			2	•
4670.	02260	01	SOCIAL AND ECONOMIC ADMINISTRATION	;A,X,UK
4671.	.02261	01	SOCIAL AND ECONOMIC STUDIES	:A,X,JM
4672.	04394	01	SOCIAL CASEWORK	; A, -, US
4673.	03661	01	SOCIAL CONTROL OF ECONOMICS, AN INFOR	MATORY CORRE
4674.	02262	01	SOCIAL FORCES .	: A , X , US
4675.	03596	01	SOCIAL POLICY	: A , X , US
4676.	02986	01	SOCIAL PROBLEMS	:A,X,US
4677.	0298 7	01	SOCIAL PSYCHIATRY	:A, ,GW
4678.	02263	. 01	SOCIAL RESEARCH	;A,-,US
4679.	02988	01	SOCIAL SCIENCE AND MEDICINE	:A,X,UK
4680.	02264	01	SOCIAL SCIENCE INFORMATION -	:A,X,NE
4681.	02265	R^{01}	SOCIAL SCIENCE QUARTERLY	: A , X , US
4682.	02266	01	SOCIAL SCIENCE RESEARCH COUNCIL ANNUA	L REPORT
4683.	02267	01	SOCIAL SCIFNCE RESEARCH COUNCIL NEWSL	ETTER
4684.	03884	. 02	SOCIAL SCIENCE RESEARCH COUNCIL OF CA	NADA, ANNUAL
4685.	03562	01	SOCIAL SCIENCES IN HEXICO	:A,-,MX
4686.	02989	01	SOCIAL SCIENCES, INFORMATION	: A,-,NE
4687.	02268	01	SOCIAL SECURITY BULLETIN .	:A,X,US
4688.	02269	01	SOCIAL SERVICE QUARTERLY	:A,X,UK
4689.	02270	01	SOCIAL SERVICE REVIEW	:A,X,US
4690.	02790	01	SOCIAL SERVICE REVIEW .	: A US
4691.	03575	01	SOCIAL STUDIES CURRICULUM DEVELOPMENT	:1.X.
4692.	03594	y 01	SOCIAL WELFARE AND HUMAN RIGHTS	: K, X, US
4693.	03643	'01	SOCIAL WELFARE FORUM, OFFICIAL PROCEED: K.X.UK US	INGS, ANNUA'
4694.	02271	01	SOCIAL WORK	:A,X,UK
4695.	035c4	01	SOCIAL WORK PRACTICE, SELECTED PAPERS, :K, X, US	ANNUAL FORL
4690.	0227 2 *	01	SOCIAL WORK TODAY	:A,X,ÙK
•			• •	



APPENDIX L



PROOF READING AND UPDATING CLOSSS

These notes give details of the procedures for submitting new records to the machine readable file and for making corrections and amendments to existing records during the proofreading of the printed listings.

The update program provides for the listing of individual records, and for the insertion, replacement and deletion of both complete records and of individual fields within records. These notes are divided into two sections; the first giving details of the record handling facilities, and the second giving details of the field handling facilities.

1. Record Handling

- (i) A new CLOSSS record submitted will be inserted into its correct position in the machine file. No insert message is printed. The record will be processed and listed by the data vet procedure.
- (ii) A CLOSSS record submitted with the same CLOSSS number as an existing record will replace the existing record completely. A replace message is printed. The new record will be processed and listed in the normal manner.
 - Note (a) There is no special replace instruction necessary to indicate that an existing record is to be replaced.
 - (b) If the new record fails the processing stage, the cards comprising the record will be listed. The original record is not then retained. If the new record is correctly repunched and submitted to the next update run, it will be treated as an inserted record (see (i) above).

Records of types (i) and (ii) will be submitted in the normal manner, i.e. punched directly from the CLOSSS sheets, and there is no distinction between them. They may be in either old or new field code format.



(iii) An existing record may be deleted by using the delete instruction. This takes the format

OOXXXXXD*

where the XXXXX represents the five digit CLOSSS number of the record to be deleted.

On submitting this instruction to the update program, the complete CLOSSS record will be deleted from the machine file, and a delete message printed.

The purpose of this instruction is to delete duplicated entries in the file.

(iv) An existing record may be reprocessed by using the list instruction. This takes the format

'OOXXXXXL*

where the XXXXX represents the five digit CLOSSS number of the record to be reprocessed.

No special message is printed, and the existing record will be processed and listed in the normal manner in new field code format.

The (iii) and (iv) instructions will be submitted to the update program on cards punched directly from the corrected proofreading listing. The CLOSSS number field should be flagged on the left with an arrow, and the required instruction (either D* or **) inserted to the right of the CLOSSS number.

Note. If an instruction is submitted for a record which is not present in the file, then a message to this effect is printed and the instruction is ignored. This is also true for the modify instruction described in section 2.

2. Field Handling

The handling of individual fields within a particular CLOSSS record is achieved by the use of the modify instruction. This instruction caters for the insertion, replacement and/or deletion of fields within records. The general form of the



instruction is:

OOXXXXXM## Replacement data

where the XXXXX represents the five digit CLOSSS number of the record to be modified, and the replacement data submitted will be in the form:

2 digit field code field data end of field # mark or end of record * mark

The total length of the replacement data field may not exceed 250 characters.

All field codes must be new format field codes. For the last data element in the string, the end of field mark must be replaced by an end of record * mark.

Individual data fields may be inserted, replaced and/or deleted in the following manner:

- (i) If a field code is submitted with data, and no field with the same field code exists in the record, then the field will be inserted into the record. No insert message is printed.
- (ii) If a field code is submitted with data, and a field with the same field code already exists in the record, then the new data will replace the original data in the record, and a replace message with the field code will be printed.
- (iii) If a field code is submitted with no data, i.e. it is immediately followed by a # end of field or * end of record mark, and a field with the same field code already exists in the record, then the original data will be deleted from the record, and a delete message with the field code will be printed.

 (A replace message will always be printed before a delete message unless the original record did not contain an entry for the field code, in which case the field is deleted and no replace message will precede it). See example 2 given below.

Fields may be built up in any sequence, but it is necessary that all data elements for a particular field code are together. Having successfully modified an existing record, then the complete record is processed and listed by the data



vet procedure.

- Notes (a) If the modification to an existing record is invalid, and the update program is unable to handle the data submitted, then the modification instruction is completely ignored and the cards forming it are listed. The original record is restored to the file, but is not listed.
 - (b) For duplicated fields it is not possible to handle any particular item in the field, and the complete data for all the items is necessary if an item in the field requires modification.

Correction of Errors on the Proofreading Sheets

Each CLOSSS record contains fields which consist of either actual data, e.g. titles, names of publishers, or coded data. Thus, errors in a record fall into three groups.

- 1. incorrect spalling of actual data,
- 2. incorrect coding of coded data, or data not coded,
- 3. incorrect field code for the data.

Each CLOSSS record requiring modification should have its CLOSSS number field flagged to the left with an arrow, and the M# instruction should be written to the right of the CLOSSS number. The corrected data for coded fields, and any field delete instructions can then be built up in the following manner:

2 digit field code field data end of field # mark for insertion or replacement of fields,

or 2 digit field code end of field # mark

for deletion of fields

to the right of the $M \not$ instruction. Fields can be built up in any field code sequence, but it is necessary that all data fields for a particular field code are together.

For cases where a spelling mistake occurs in an actual data field, the characters in error should be clearly corrected. An arrow should be inserted to the

left of the field code, and an end of field ## mark should be inserted to the right of the data. Any old format field codes in brackets should be crossed out. For fields with duplicate entries, all fields with the same field code should be labelled as described.

If data exists with an incorrect field code, then it must be inserted with the correct field code, and the incorrect field code deleted.

At the end of the last modification instruction entry, the # end of field mark should be replaced by a * end of record mark.

Examples

1. If data in a record exists as

which is required to be:

16 FRE

16 ENG

16 AA

17 MA

. 16 FRE

46 ENG

17 AA

17 MA.

then the modify instruction will need the complete entries for both fields 16 and 17, and will take the form:

00 CLOSSS / M# 16 FRE # .16 ENG # 17AA # 17 MA *



OO CLOSSS M# 17 AA# 17 MA# 16FRE# 16 ENG *

2. If data in a record exists as:

16 ENG

16 FRE

20 GER

which is required to be:

16 ENG

16 FRE

117

16 GER



then the modify instruction will need the complete data entries for field 16,

and delete for field 20, and will take the form:

qr

OO CLOSSS M#20#16ENG#16FRE#16GER*